Online Building Plan Sanction User Manual – Building Plan - Fresh Residential Plotted Development

Architect

MCD



# दिल्ली नगर निगम

**Municipal Corporation of Delhi** 

# **Online Building Plan Sanction**

**User Manual** 

To

Prepare Building Plan
For
Fresh Residential Plotted Development

Version 1.02

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#### 1. Introduction

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This document provides guidelines and instruction to the public who wish to avail Online Building Plan Sanction Service for Fresh Residential Plotted Development.

Building Plan in \*.DWG format to be prepared and uploaded for the Bye-law validation and get it sanctioned by MCD

Before preparing please download the latest version of the User Manual, \*.mun, \*.vlx etc

## 2. Intended Audience

- Architects
- Engineers
- Supervisors
- Draughtsman
- MCD Building Plan Sanction Authority

#### 3. References

S. No	References	
1	Building Bye-Law 1983	
2	Master Plan of Delhi 2021	

#### 4. Definitions and Acronyms

Abbreviation/Term	Description
MCD	Municipal Corporation of Delhi
BBL	Building Bye-Law 1983
BP ID	Build Plan ID – System generated ID while applying for Building Plan Sanction
MPD	Master Plan of Delhi 2021
NA	Not Applicable
Min.	Minimum
Max.	Maximum
М	Meters
OBPS	Online Building Plan Sanction
sq. m	Square Meter

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NR	No restriction
FAR	Floor Area Ratio = Total covered area of all the floor x 100 / Plot Area
DU	Dwelling unit
ECS	Equivalent Car Space

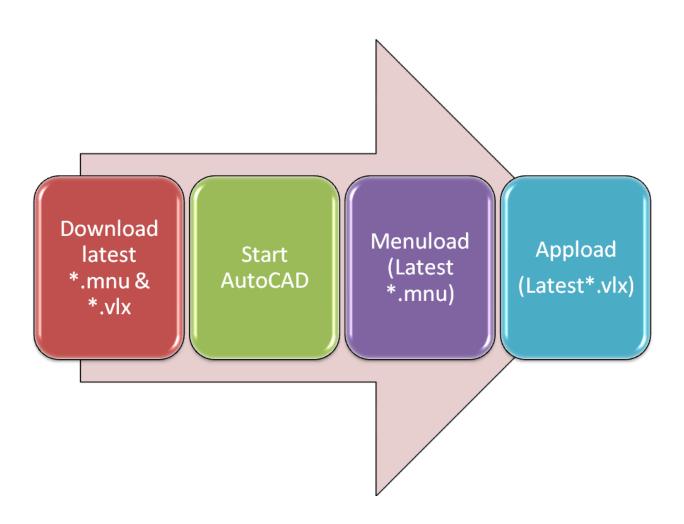
# 5. Prerequisite

- > Registration with MCD
- ➤ Knowledge in BBL and MPD
- > Building Plan / Architectural Drawing Creation experience
- > AutoCAD experience

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# 6. Building Plan Creation

#### **6.1 Environment Preparation**



Step 1: Download latest version of the following files from the portal and save them to a local folder.

- 1. MCD-Fresh\_Res\_Plotted\_V1.0.mnu
- 2. MCD-Fresh\_Res\_Plotted\_V1.0.vlx

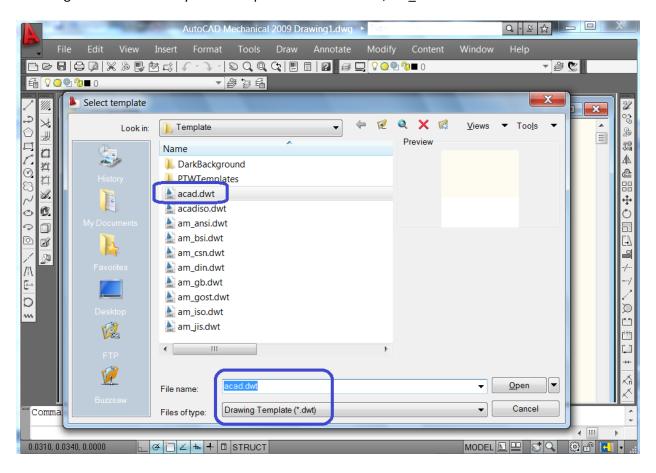
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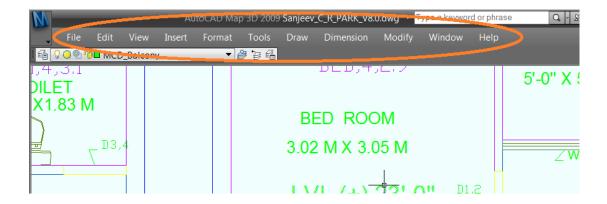
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Version V1.0 is given for example. Always before startup **download the latest \*.mnu & \*.vlx files** from the portal; may have different latest version number.

#### Step 2: Start AutoCAD (AutoCAD 2004 to 2012 can be used to create the building plan)

While opening new drawing in AutoCAD, make sure **acad.dwt** is selected from template as shown in the below figure. Do not use any other template like acadiso.dwt, am\_ansi.dwt etc ...



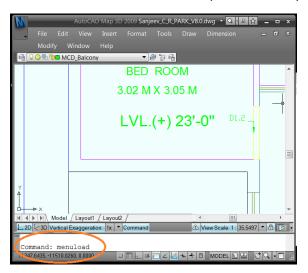


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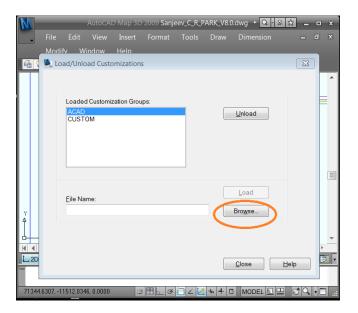
Fig: Before loading \*.mun

Step 3: Type Menuload in the AutoCAD command line and press Enter key

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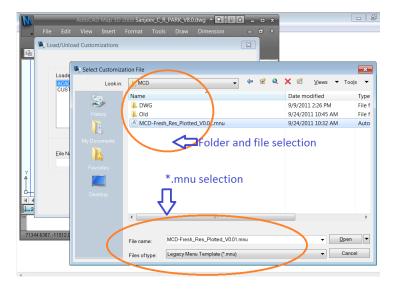


Press **Browse** button in 'Load/Unload Customization' dialog box

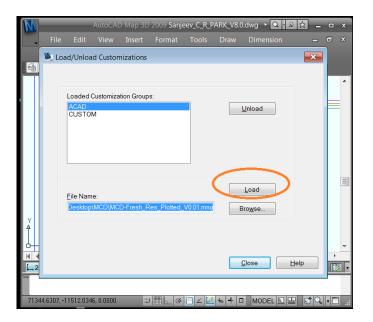


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In 'Files of Type' chose \*.mun and select the respective \*.mnu file and press 'Open' button.



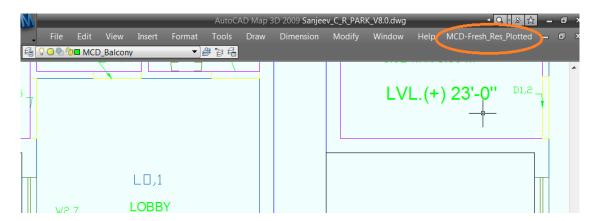
Press **Load** button in 'Load/Unload Customization' dialog box. Then press **Close** button.



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Upon successfully loaded a new MCD-Fresh\_Res\_Plotted menu will be displayed on the top.

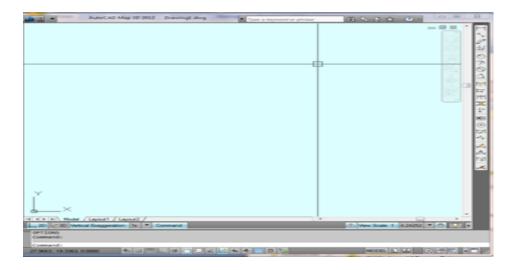


TIPS:

In case if you get 'Menu already loaded' message means the same version is already loaded hence need not load again. Just check whether you need to click on **Show Menu Bar** as shown below.

#### Show menu bar

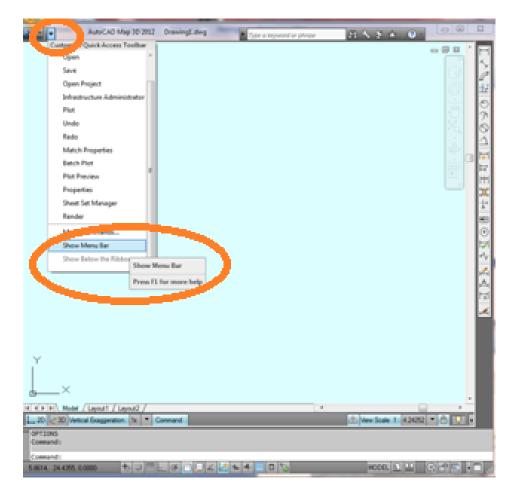
In few AutoCAD version even after loading the \*mnu file, the menu may not be visible as shown below.



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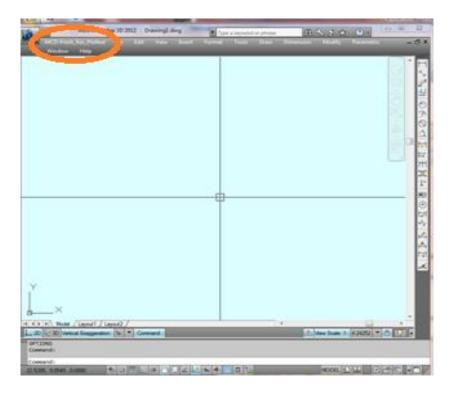
In that case click on down arrow on the top left corner and select **Show Menu Bar**.

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Now MCD-Fresh\_Res\_Plotted menu will be visible.



#### **Unload Menu**

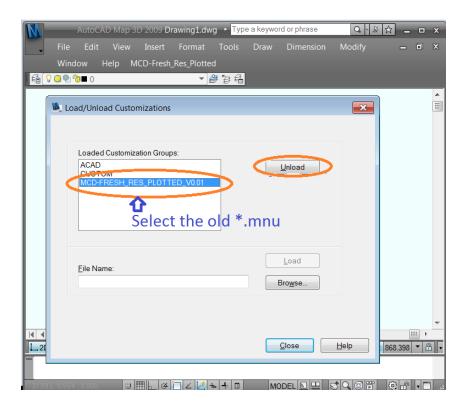
If you get a latest version of \*.mun from the MCD portal, then unload the already loaded menu as follows and load the latest \*.mnu again.

Type **Menuload** in the command line and press **Enter** Select the old \*.mnu from the 'Loaded Customization Groups'

Press **Unload** button

Press **Browse** button and select the folder and latest \*.mnu file and press **Load** button.

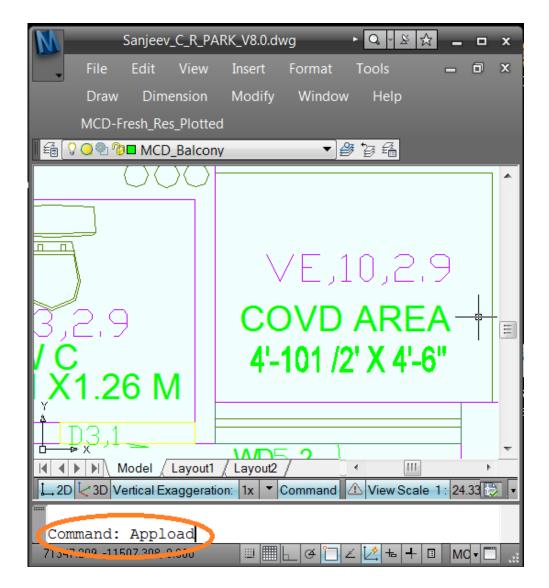
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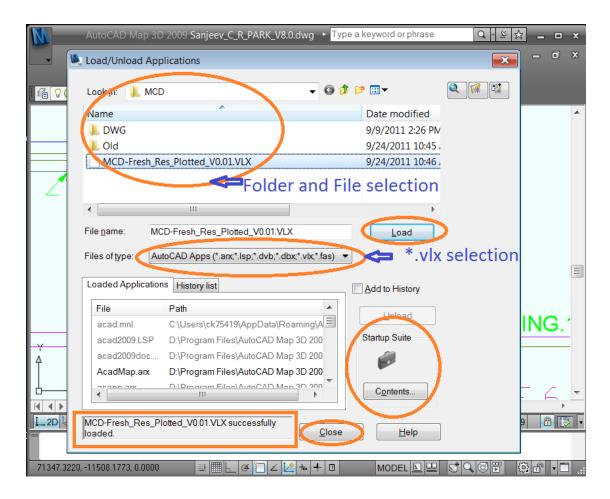
Step 4: Type Appload in the AutoCAD command line and press Enter

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'Load/Unload Application' dialog box will open, if required in 'Files of Type' chose \*.vlx. Navigate to the folder and select respective \*.vlx then press Load button. Successfully loaded message can be seen as shown in the below image. Then press Close button. Remember to load the \*.vlx during each time of opening a \*.DWG.

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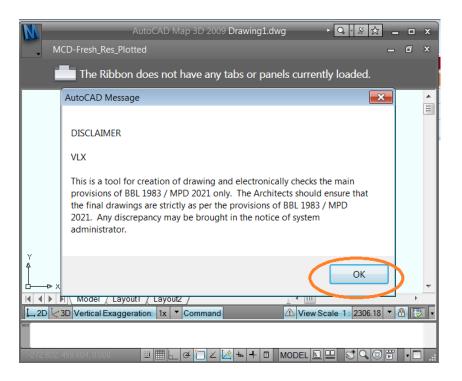
Upon successful loading of the latest \*.VLX, accept the disclaimer and the license agreement as shown below.

#### TIPS:

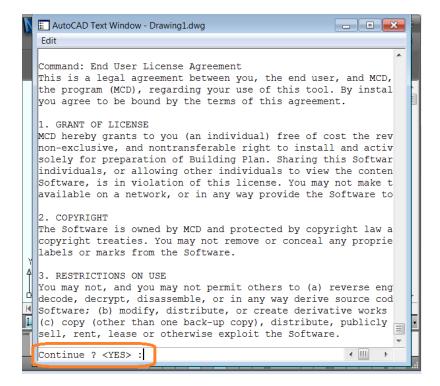
Each time opening the DWG \*.VLX need to be loaded

In case downloaded latest \*.VLX, can be re-loaded the latest \*.VLX by following the above setps. Instead of typing **Appload** you can type **AP** and press **Enter** to navigate to the Load / Unload dialog box.

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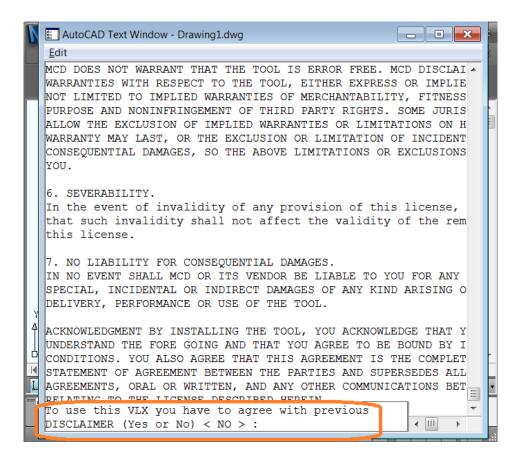
#### Read and Press OK button



Read and press **Enter** to continue

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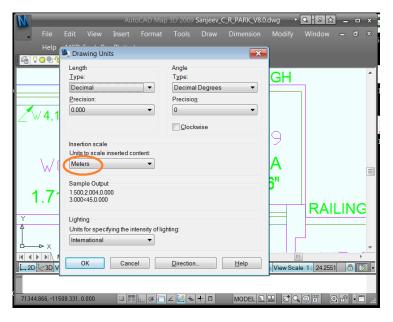
Type **Y** and press **Enter** to use the VLX or press **Enter** those who do not want to use the VLX

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#### 6.2 General Guideline

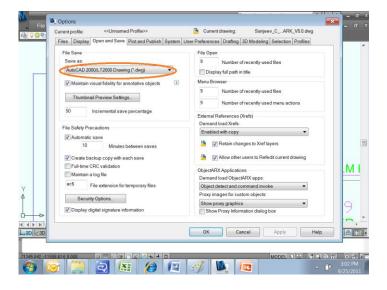
Even upon loading the latest \*.mnu & \*.vlx files, all existing AutoCAD menus and commands will work as usual.

The tool will take care of units; the auto set units is in **Meter. Draw the building features in 1:1 scale in Meter.** 



Do not change the above Drawing unit settings.

The tool will set the saving option to AutoCAD 2000. Do not change this option.

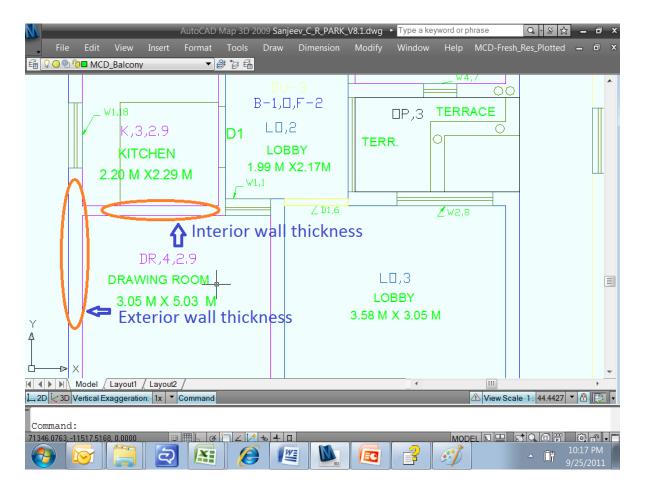


No separate wall layer is being maintained. Distance between two features shall be calculated

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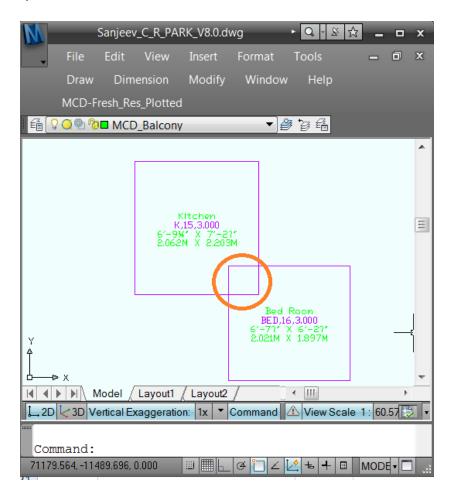
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as wall thickness. Hence before staring the next feature mark the required wall thickness and then begin from that point.



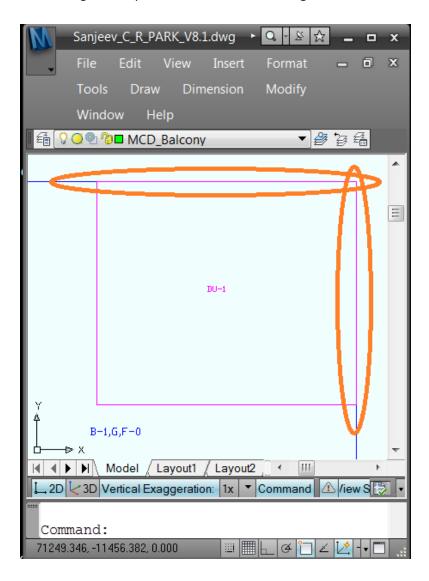
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Overlap of two features is not allowed.



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Outer edge overlap of Floor Area and Dwelling Area is allowed and should be drawn as below.



The tool is designed to represent a big plot having many buildings (blocks), each building has many floors, each floor has many dwelling area, each dwelling has many rooms and the building has common features like Lift, Shaft, Pergola etc ... Hence even the proposed plot has only ground floor with a single dwelling unit need to be represented with **Plot Area, Covered Area, Floor Area, Dwelling Area, Rooms etc.** 

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#### 6.2.1 Convert existing DWG building plan

Open

Open existing DWG in AutoCAD

Scale

• Scale down to 1:1 Meter (including Site Plan)

\*.mnu

Menuload (Latest \*.mnu)

\*.vlx

Appload (Latest \*.vlx)

Trace

• Trace Building Features using Menus

#### <u>Open</u>

Open existing DWG in AutoCAD

#### <u>Scale</u>

Scale entire objects to 1:1 meter using following scale factor.

S. No.	Units of existing DWG	Scale factor	Remarks
1.	Architectural (Feet / Inches)	0.025403	
2.	Millimeters	0.001	
3.	Meters	NR	
4.	Other units	Calculate and apply	



Usually Site Plans are created in different scales. Accordingly scale the Site Plan to make to 1:1 in Meter

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After scaling measure few features using **Dist** command and confirm whether the DWG is scaled to 1:1 in Meter

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#### **Trace**

Select the required **Submenu** (from MCD-Fresh\_Res\_Plotted) and draw the features over the existing features (Use **OSanp** for perfect snapping and dimensions).

#### <u>Rectangle</u>

Refer to the below section **Create a new DWG building plan** and **Rectangle** option for steps to be flowed

#### **Polyline**

Refer to the below section Create a new DWG building plan and Polyline option for steps to be flowed

### TIPS:

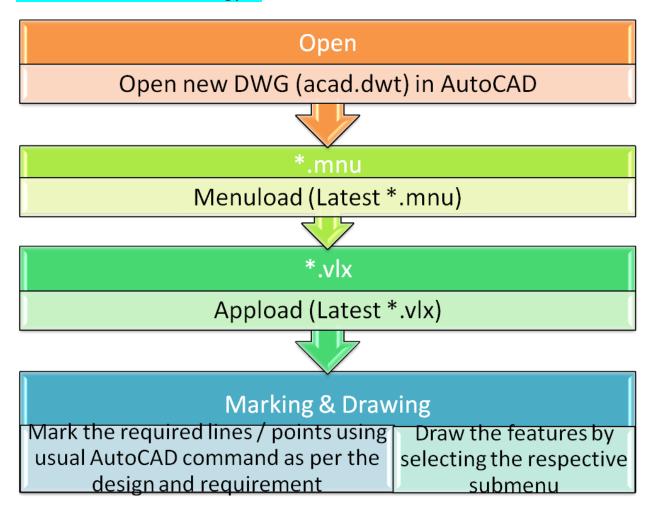
Before starting to trace refer to below section "Draw Building Plan using Menu" and understand the concepts.

Before uploading the DWG in MCD portal delete all the layers excluding 0, Defpoint, MCD\_\*

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#### 6.2.2 Create a new DWG building plan



#### Open

Open a new DWG (acad.dwt) in AutoCAD.

#### **Marking & Drawing**

Usual AutoCAD commands like offset, line, pline, point etc can be used to create skeleton (create in required layers) of the building as per the design and requirements. Then draw the features by selecting the respective submenus from MCD-Fresh\_Res\_Plotted (Use **Osnap** for perfect snapping and dimensions).

Most of the menu provide two options (Rectangle & Polyline) to draw the building features.

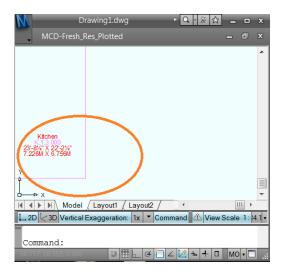
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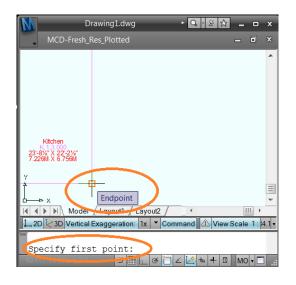
### Rectangle

Rectangle option can be used in case the feature's shape is square or rectangle and we know the length and width of the same.

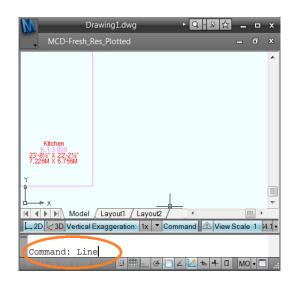
Let us draw **Dining Room** having 3.25 M x 4.15 M near the Kitchen. Assume Kitchen is already drawn using the menu.



S1 - Start



S3 – Corner of the Kitchen is start point of line

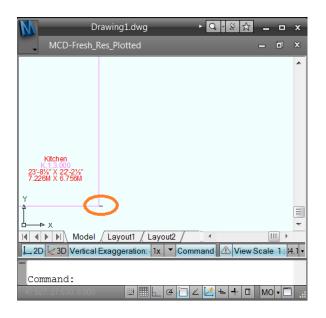


S2 – Use AutoCAD **Line** command to mark wall thickness of 0.114 M



S4 – Wall thickness of 0.114 M is entered as end point of the line by typing **@0.114<0** (0 to draw horizontally)

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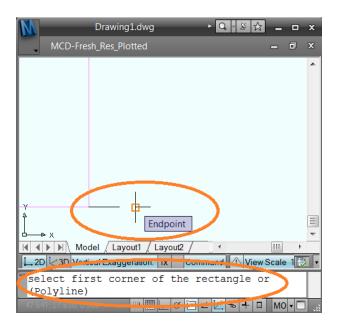


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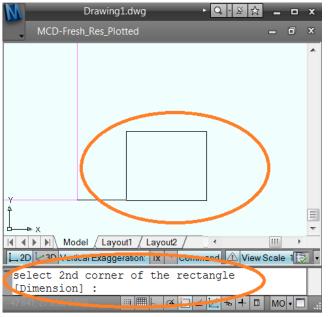
S5 – Terminate the line command by press **Enter** Again. Drawn 0.114 M line.



S6 – Select Dining Room from the menu as shown



S7 – Expecting start point of rectangle; click at end of the 0.114 line

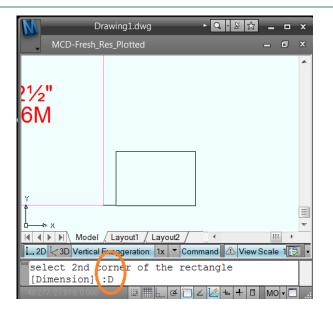


S8 – Can select second point if we have already marked the diagonal point or we can go for Dimension

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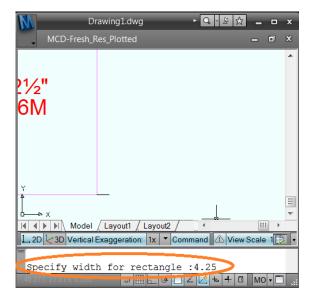
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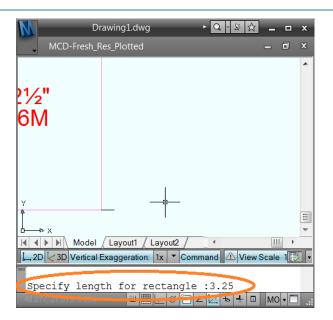


S9 – Type **D** and press **Enter** 

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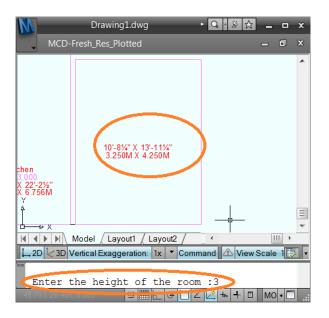
S11 - Enter width **4.25** 



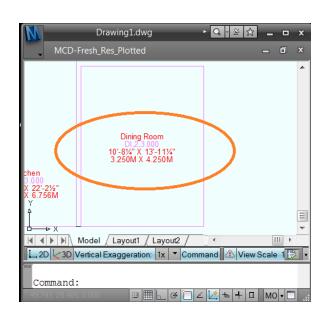
S10 - Enter length 3.25

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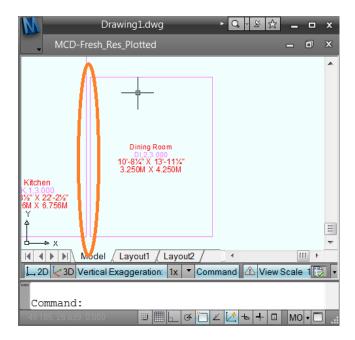
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S12 - Enter height 3



S13 – Dining room has been drawn

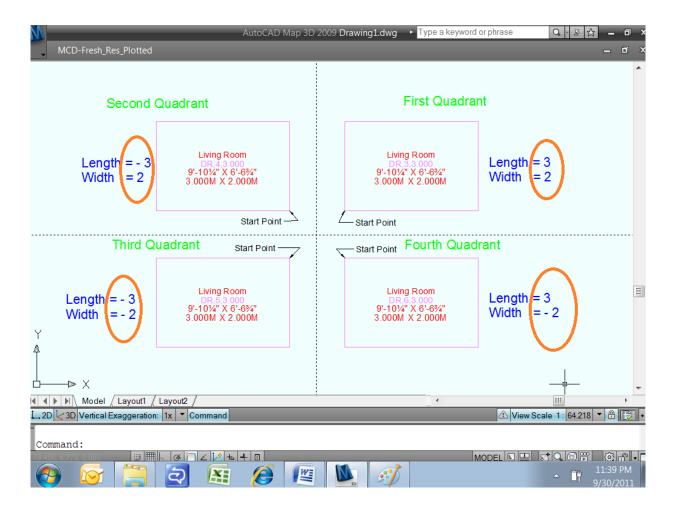


S14 – Erase the 0.114 line which was drawn to mark The wall thickness

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#### TIPS:

In case of selecting Rectangle and Dimension then based on the start point of the rectangle and the required position of the rectangle (as like in the quadrant) the **Length and Width** need be entered with **negative or positive value** as follows.



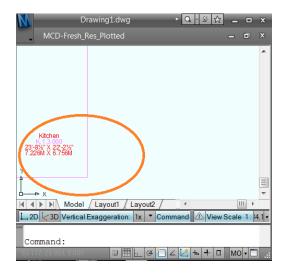
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#### Polyline

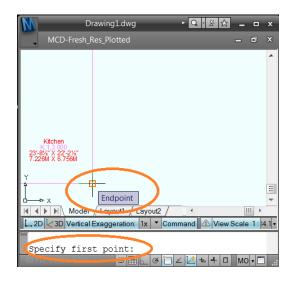
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Polyline option can be used in case the room shape is irregular (including curved shape).

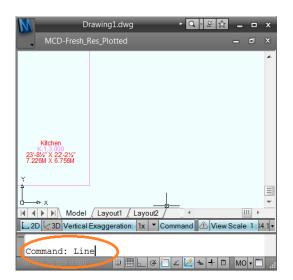
Let us draw a 'L' shaped Store room near the Kitchen. Assume Kitchen is already drawn using the menu.



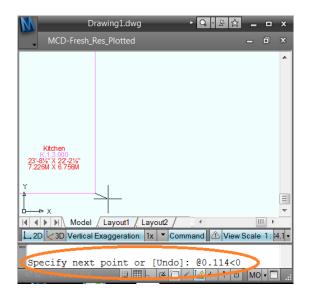
S1 - Start



S3 – Corner of the Kitchen is start point of line



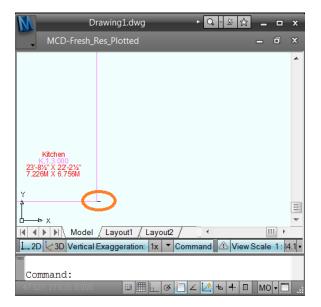
S2 – Use AutoCAD **Line** command to mark wall thickness of 0.114 M



S4 – Wall thickness of 0.114 M is entered as end point of the line by typing **@0.114<0** (0 to draw horizontally)

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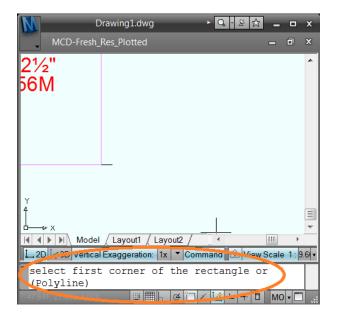
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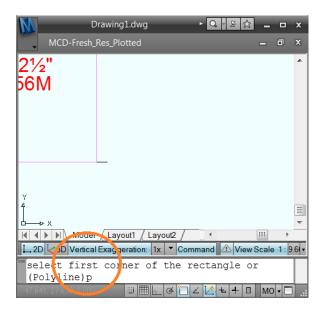
Drawing1.dwg MCD-Fresh\_Res\_Plotted Site Plan Floor Area (Plan) Dwelling Features (Plan) Room (Plan) Kitchen Building Features (Plan) Kitchen and Dining Floor Height (Section) Pantry Parking (Plan) Dining Room Garage (Plan) Bed Room Miscellaneous LivingRoom Others Drawing Room / Living Room Paper Drawing Room and Dining Room Complete Dressing Room Study Room | | | | | | | Model | Layout1 | Layout2 | Store Room L 2D < 3D Vertical Exaggeration: 1x ▼ Con Toilet Bath Room Command: Bath and Water Closet Water Closet Veranda

S5 – Terminate the line command by press **Enter** Again. Drawn 0.114 M line.

S6 – Select **Store Room** from the menu



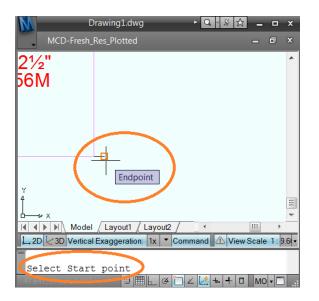
S7 – Giving option to select start point of Rectangle or Polyline



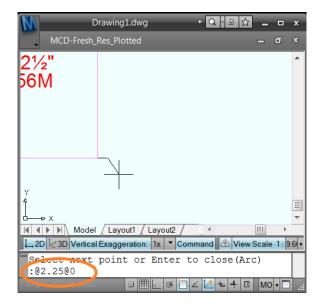
S8 – Type **P** and press **Enter** to select Polyline option

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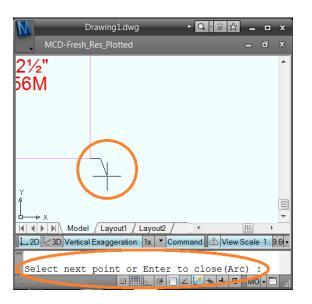
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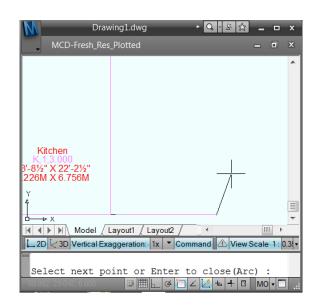
S9 – Click end point of 0.114 M line to specify start point of the store room



S11 – Type **@2.25<0** to draw a line horizontally Left to right and press **Enter** 

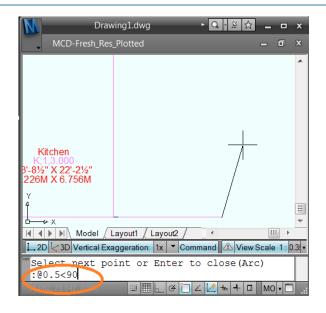


S10 – Expecting next point to be selected



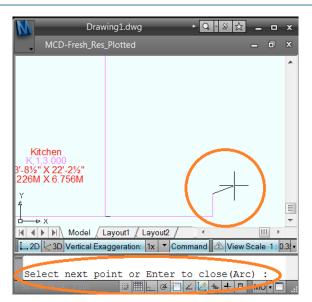
S12 – After drawing 2.25 M line expecting next point to be selected

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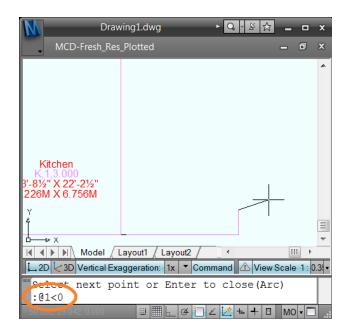


Architect

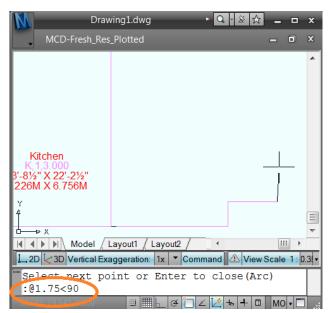
S13 - Type **@0.5<90** to draw a line vertically Bottom to top and press **Enter** 



S14 – Expecting next point

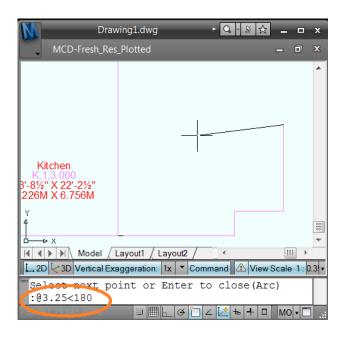


S15 - Type **@1<0** to draw a line horizontally left to right and press **Enter** 

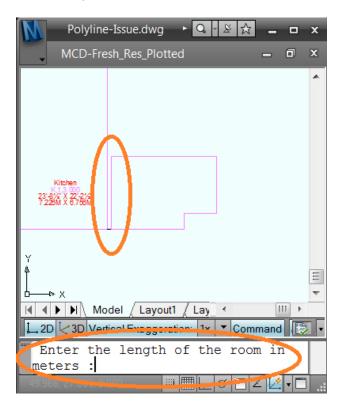


S16 - Type **@1.75<90** to draw a line vertically Bottom to top and press **Enter** 

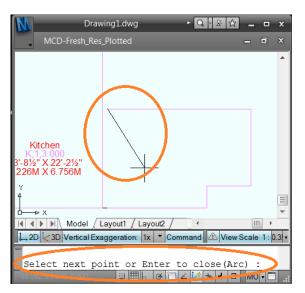
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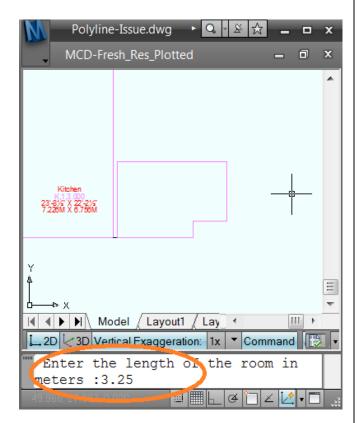
S13 - Type @3.25<180 to draw a horizontal line right to left and press Enter



S15 – Closed polygon created and expeting dimesions



S14 – Expecting next point for line; press **Enter** to snap with the strat point of the Polyline



S16 – Enter length of the room (3.25)

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Polyline-Issue.dwg

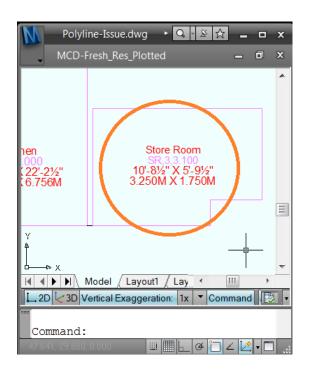
MCD-Fresh\_Res\_Plotted

NCD-Fresh\_Res\_Plotted

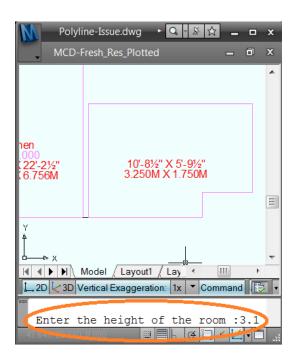
NC

Architect

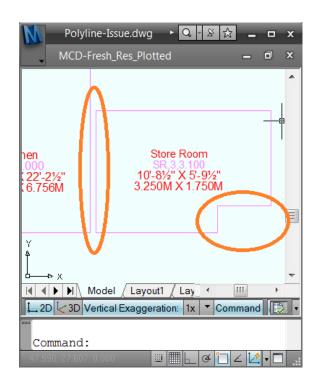
S17 - Enter width of the room (1.75)



S19 – Store room is created.



S18 – Enter clear height of the room (3.1)



S20 – Erase the line (0.114) that was drawn to mark the wall thickness

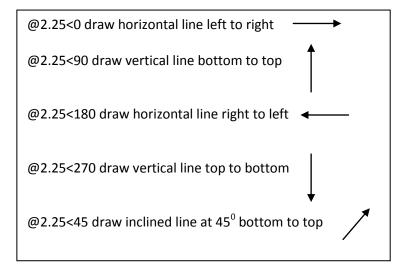
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Architect

## TIPS:

In case of polyline (irregular shape room) user need to enter length and width of the biggest rectangle which can be fitted inside the irregular shaped room.

Use @2.25<0 to draw polyline. In this example 2.25 is length of the polyline to be drawn and 0 is angle at which it has to draw.



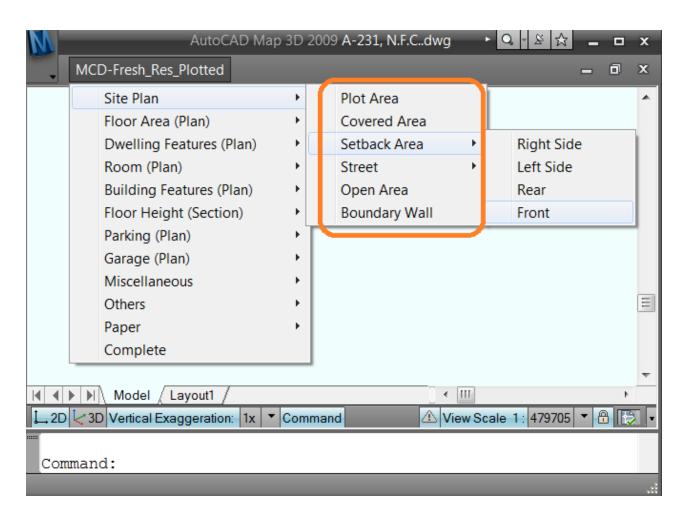
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#### 6.2.3 Site Plan

Architect

Draw in 1:1 scale in Meter. Following features can be captured based on the requirement.

- Plot Area(For Site Plan)
- Adjacent Plot(NTS)
- Adjacent Park(NTS)
- Building Area
- Setback Area
- Street
- Open Area
- Garage Servant Building
- Boundary Wall



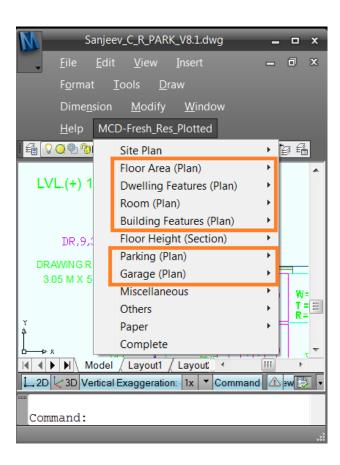
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Architect

## 6.2.4 Plan

Draw in 1:1 scale in Meter. Plans of Basement, Stilt, Ground floor and upper floors can be drawn with the help of following menus.

- > Floor Area
- Dwelling Area
- > Room
- Building Features
- Parking
- Garage



### 6.2.5 Section

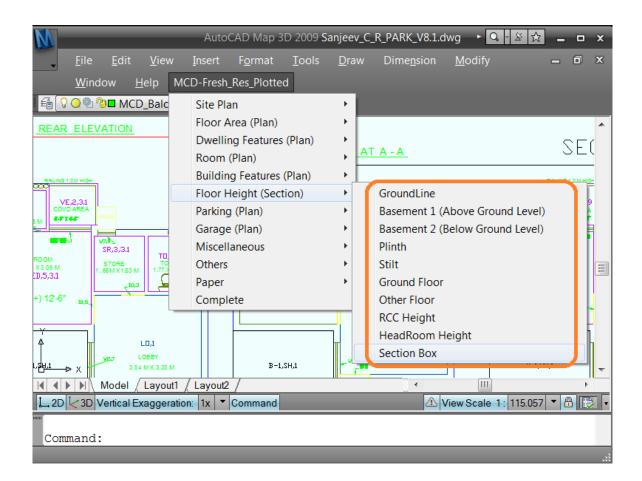
Draw in 1:1 scale in Meter. Sectional view is used to determine the Building Height. Following sectional view features can be drawn in this view.

- o Groundline
- Basement
- Plinth
- o Stilt

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Architect

- o Ground Floor
- Other Floors
- o RCC Height
- Headroom Height



Use **Line1** to **Line6** of **Miscellaneous** to represent other sectional features like wall, door, widow, balcony, parapet wall, room, stair etc.

Sectional line in the Plan can be drawn using **Line1** to **Line6**.

Each Sectional view should be enclosed with Section Box.

## 6.2.6 Elevation

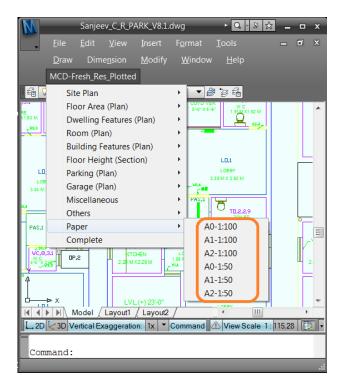
Use **Line1** to **Line6** of **Miscellaneous** to represent elevation features.

Each Elevation view should be enclosed with Elevation Box.

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# 6.2.7 Paper Size

All the drawn entities should be enclosed with suitable paper size with appropriate scale.



- ✓ As many paper size as required can be used based on the requirement.
- ✓ Do not stretch the paper size.
- ✓ While fitting the entities inside the paper size, take due care to move the polygon (outer box) and corresponding text together without stretching or changing its integrity.

### 6.2.8 Complete

Upon completion of the drawing before final save, press **Complete** button.

### 6.2.9 Mandate Features

The tool is designed to prepare building plan of a plot having many buildings; each building has many floors; each floor has many dwelling units; each dwelling unit has many rooms and building has common features like lift, shaft, passage etc...

Hence following features are mandate in each building plan

- ✓ Plot Area
- ✓ Covered Area (One for each building should be drawn and minimum one is mandate)

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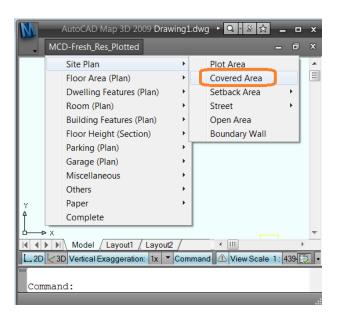
**MCD** 

Architect

- ✓ Floor Area (At least Ground Floor should be drawn)
- ✓ Dwelling Area (At least one should be drawn)
- ✓ Rooms (Kitchen or Kitchen and Dining, Bed room, Toilet or Bath Room or Bath and Water Closet or Water Closet)
- ✓ Other features based on the requirement

## 6.2.10 Drawing Curved features

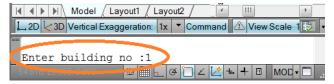
Curved features can be drawn by selecting Polyline option in most of the menus.



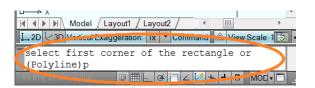
### S1 - Select Covered Area



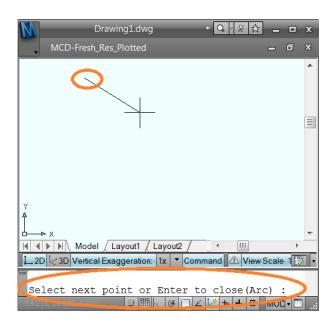
S4 – Pick start point of the building



### S2 - Enter building number



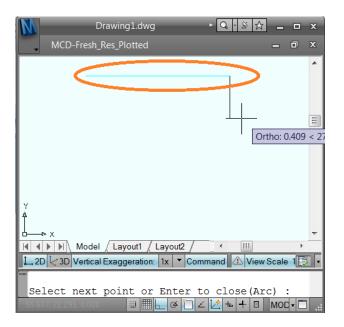
S3 – Type P and press Enter to select Polyline



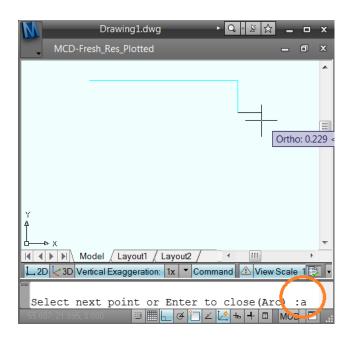
S5 – After picking the start point pick the second point

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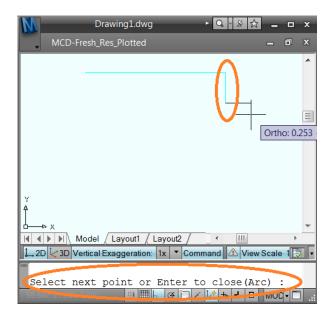
Architect



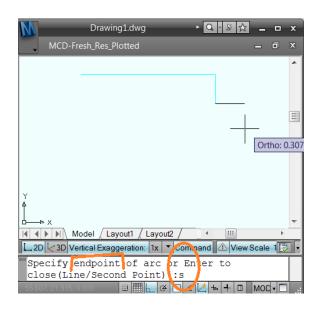
S6 - Pick next point



S8 – Type A and press Enter to switch from line to arc



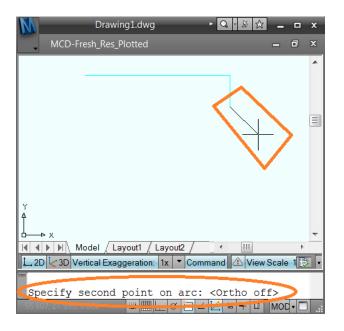
S7 - Pick next point



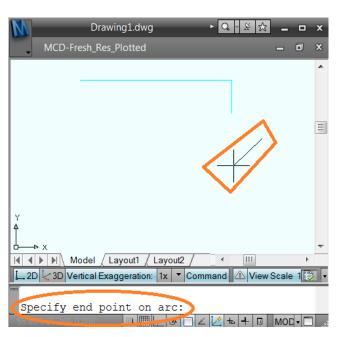
S9 – Type **S** to select option of picking second point of the arc

In case you want to pick end of the arc in this stage directly pick the end point (typing S is not Required)

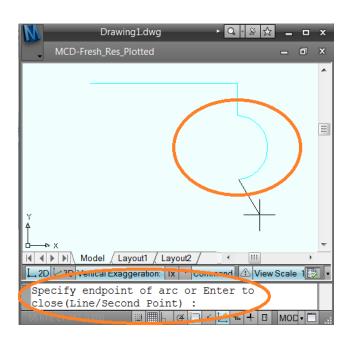
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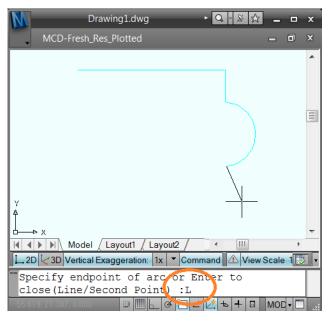
S10 – Pick second point of the arc



S11 - Pick the end point of the arc

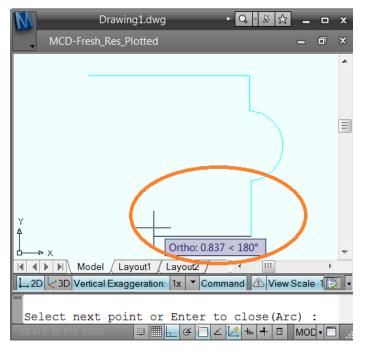


S12 – Can continue for another arc by picking end point Of the arc or by typing S to have option of second and end point of the arc

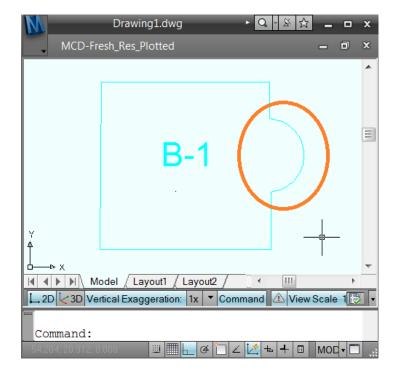


S13 – Type L to switch to line option

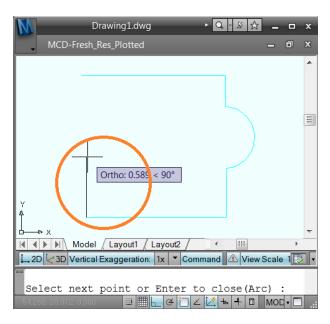
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S14 - Pick end of line segment



S16 - Curved feature has been created



**MCD** 

S15 – Pick end of line segment and press **Enter** to close the polyline

# TIPS:

In the polyline type A and press Enter to switch between line to arc.

In the polyline type L and press Enter to switch between arc to line.

There is no limit in switching between line and arc and vice versa.

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### 6.2.11 Key plan/ Layout plan / Part Layout Plan

Key plan / Layout plan / Part Layout Plan should be drawn in the drawing in suitable scale using the menu provide.

#### TIPS:

Architect

Need not to draw in 1:1 scale in Meter

### 6.2.12 Name plate / Certificates / Area chart / Parking chart

Name plate, Certificates like water harvesting, structural stability etc, area chart and parking chart are need to be shown in the building plan DWG. Tool will automatically calculate and populate in the final plot PDF.

#### 6.2.13 Others

If any of already set (by tool) layer color and background color are same the drawn feature will not be visible, hence change the background color as follows

- 1. Type Options in the command line and press Enter
- 2. Click on Display tab
- 3. Click Colors... button
- 4. Click on Color button on top right side of the 'Drawing Windows Color' dialog box
- 5. Change the color which is not already used by the layers

If you want to load usual AutoCAD menu please load from the following path based on your AutoCAD version

C:\Users\<User Name>\AppData\Roaming\Autodesk\AutoCAD Map 3D 2012\R18.2\enu\Support Either or all of the below menus can be loaded.

- custom.cuix / custom.mun / custom.cui
- acad.cuix / acad.mnu / acad.cui

The tool will place text inside the rectangle / polyline drawn. The text should not be moved outside of the respective rectangle / polyline.

While drawing few features like room, door, window etc. an auto sequential number is generated by the tool to represent the feature in the report. If there is any gap is introduced in the sequential number due to deletion of the feature will not affect the building plan. Hence need not bother about the auto number generated by the tool.

Press **Enter** to close the feature (in the Polyline option) without picking the start point again.

Press Enter to terminate the command which draws line or arc like boundary wall, parapet wall etc.

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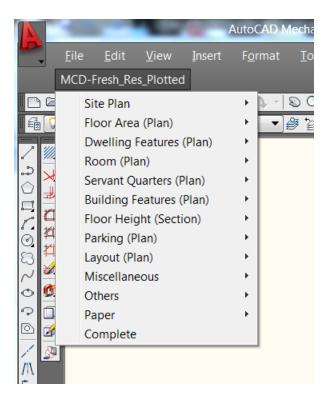
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Architect

Wherever Height, Length, Width is required, enter in Meter

## 6.3 Draw Building Plan using Menu

By clicking on the MCD-Fresh\_Res\_Plotted menu, we can view and navigate submenus. Upon clicking on the submenu as like AutoCAD the tool expects few input from the user and the same is displayed in the command line. Provide correct input one after another till the command line displays only

**MCD** 



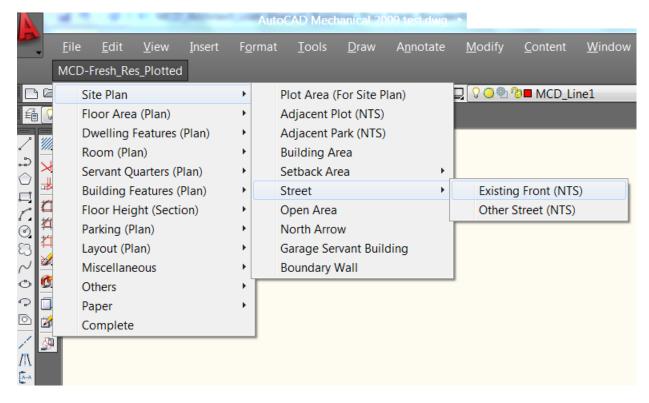
### Command:

Before starting to prepare building plan go through and practice "Convert existing DWG building plan", "Create a new DWG building plan" and "Drawing Curved features" sections.

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#### 6.3.1 Site Plan

Architect



Site plan should be drawn in 1:1 scale in Meter.

Should be used to draw only plan views.

Select Site Plan → Plot Area (For Site Plan)

Either Rectangle or Polyline option can be used based on the shape of the plot.

It is a mandate feature in a building plan.

Select Site Plan → Adjacent Plot (NTS)

Either Rectangle or Polyline option can be used based on the shape of the plot.

Adjacent plot will ask plot number.

Adjacent Plot area need not be in scale 1:1 (Not to scale)

Select Site Plan → Adjacent Park (NTS)

Either Rectangle or Polyline option can be used based on the shape of the park.

Adjacent Park will ask **Park Name** to enter.

Adjacent Plot area need not be in scale 1:1 (Not to scale)

Select Site Plan → Building Area

Either Rectangle or Polyline option can be used based on the shape of the Building.

Building Area will ask for building number.

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Architect

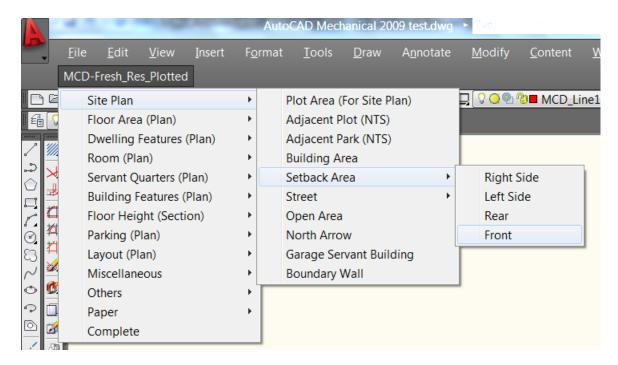
**MCD** 

Select Site Plan → Setback Area

Four types of setback area are provided, based on our requirement we need select any One of the setback area.

- -Right Side: Right side setback area.
- -Left Side: Left side setback area.
- -Rear: Rear side setback area.
- -Front: Front side setback area.

Either Rectangle or Polyline option can be used based on the shape of the setback. Enter **width** of the setback.



Select Site Plan → Street → Existing Front (NTS)

Either Rectangle or Polyline option can be used based on the shape of the street.

Enter width of the street.

Enter **street name**. (In case the front street does not have name just press **Enter**) It is a mandate feature in a building plan.

Select Site Plan → Other Street (NTS)

Either Rectangle or Polyline option can be used based on the shape of the street.

Enter **width** of the street.

Enter **street name** for other street. (In case the front street does not have name just press **Enter**) It is a mandate feature in a building plan.

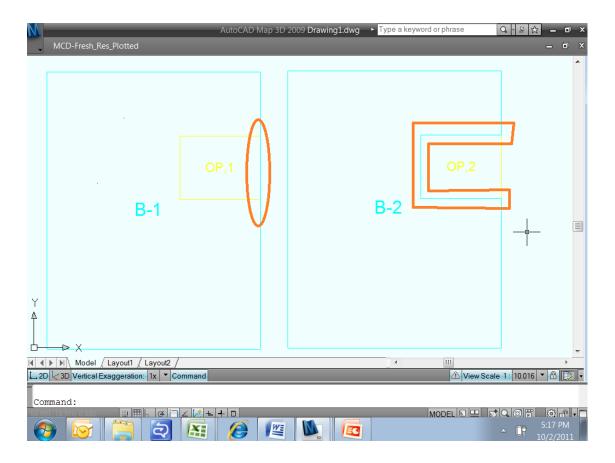
Select Site Plan → Open Area

Either Rectangle or Polyline option can be used based on the shape of the open area.

Open area can be enclosed / excluded by the covered area as shown in the below figure. While

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calculating the coverage area, system will deduce the area of open area in both the cases.



Select Site Plan → Northarrow

Pick a point to place North Arrow

Use AutoCAD Rotate command to re-orient as required

One North Arrow is mandate for site plan.

Select Site Plan → Garage Servant Building

Enter Garage & Servant building no:

(Building No. should not be duplicated in the entire drawing)

Either Rectangle or Polyline option can be used based on the shape

Select Site Plan → Boundary Wall

Select wall Front/Rear/Left/Right by typing starting letter of the wall side

Select **Service Street / Front Street** w.r.t which the boundary wall height is being measured by typing starting letter

Enter Boundary wall height

**Pick series of points** as required (Curved boundary can be drawn by typing **A** to select **Arc** and can be switched back to **line** by typing **L** in the command line)

Press Enter to terminate the polyline

Pick on the drawn polyline to select start point of the leader

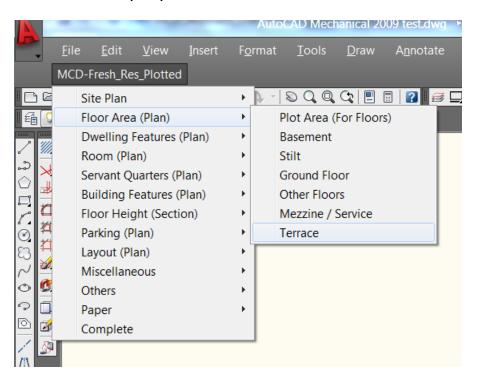
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Architect

**MCD** 

Pick second point of the leader Text will be placed by the tool to represent the boundary wall

### 6.3.2 Floor Area (Plan)



Draw in 1:1 scale in Meter. Coverage area would be calculated from this. Should be used to draw only plan views.

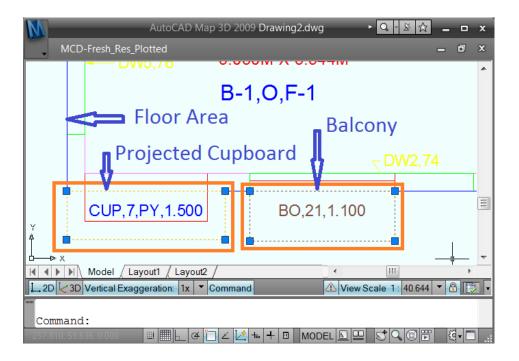
Open area, Shaft and Interior court yard can be enclosed / excluded by the floor area. While calculating the coverage area, system will deduce the area of open area, shaft etc in both the cases.

Each Floor Area should be drawn inside Plot Area (For Floors) and with reference to Plot boundary.

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Architect

Area which has relaxation from coverage area like balcony, weather shade, cupboard (projected) need to be excluded from the floor area as shown in the figure.



Select Floor Area (Plan) → Plot Area (For Floors)

Pick a point to place the Plot area {which was already drawn using Plot Area (For Site Plan)}

Only one Plot Area (For Site Plan) should be present in the drawing.

Floor areas can be drawn inside Plot Area (For Floors)

Floor area should be inside Plot Area (For Floors).

All plot areas should identical.

### Select Floor Area (Plan) → Basement

Either Rectangle or Polyline option can be used based on the shape of the basement.

Enter building number for which the basement is being drawn.

### Select Floor Area (Plan) → Stilt

Either Rectangle or Polyline option can be used based on the shape of the stilt.

Enter building number for which the stilt is being drawn.

# Select Floor Area (Plan) → Ground Floor

Either Rectangle or Polyline option can be used based on the shape of the ground floor.

Enter building number for which the ground floor is being drawn.

## Select Floor Area (Plan) → Other Floors

Either Rectangle or Polyline option can be used based on the shape of the other floor.

Enter building number for which the floor is being drawn.

Enter the floor number for which the floor is being drawn. First floor number should be 1 and second

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**MCD** 

Architect

floor number should be 2 and so on.

Select Floor Area (Plan) → Mezzine / Service Floor

Either Rectangle or Polyline option can be used based on the shape of the Mezzine / Service floor.

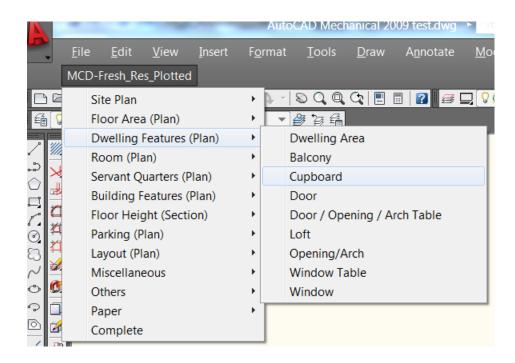
Enter building number for which the Mezzine / Service floor is being drawn.

Select Floor Area (Plan) → Terrace

Either Rectangle or Polyline option can be used based on the shape of the terrace.

Enter building number for which the terrace is being drawn.

# 6.3.3 Dwelling Features (Plan)



Draw in 1:1 scale in Meter.

Should be used to draw only plan views.

Select Dwelling Features (Plan) → Dwelling Area

Command prompt need input, hence displays **Enter Dwelling no [Duplex/Triplex]:** 

Enter Dwelling number (should be unique for a floor) in case the dwelling unit is in single floor.

Type **D** if the dwelling unit is Duplex one and then enter dwelling number. While depicting next floor of the duplex house enter the same dwelling number.

Type **T** if the dwelling unit is Triplex one and then enter dwelling number. While depicting next floors of the triplex house enter the same dwelling number.

Either Rectangle or Polyline option can be used based on the shape of the dwelling unit.

Even though there is only one dwelling unit present in that floor, dwelling area need to be drawn just over the floor area as like tracing.

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Select Dwelling Features (Plan) → Balcony

Either Rectangle or Polyline option can be used based on the shape of the balcony.

Enter railing height of the balcony.

Balcony should be drawn outside of the floor area and dwelling area.

Select Dwelling Features (Plan) → Cupboard

Either Rectangle or Polyline option can be used based on the shape of the cupboard.

Enter partition distance of the cupboard

Press enter if the cupboard is not projected outside

Type Y and press Enter if the cupboard is project outside

Select Dwelling Features (Plan) → Door

Draw rectangle between two rooms to represent door

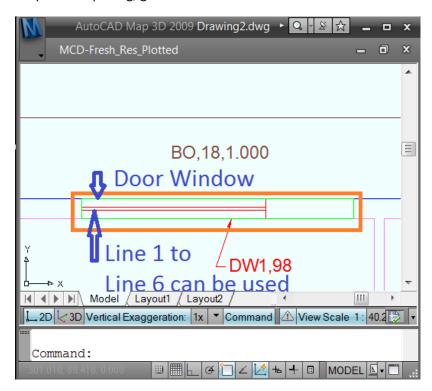
Pick start point of the leader line on the just drawn rectangle (should be inside the room)

Pick second point of the leader line

Enter door code (only integer is allowed; Prefix letter D is not required)

In case to represent **Door Window** press **Enter** and enter door code (only integer is allowed; Prefix letter DW is not required)

To represent opening, glass etc Line1 to Line6 commands from Miscellaneous menu can be used

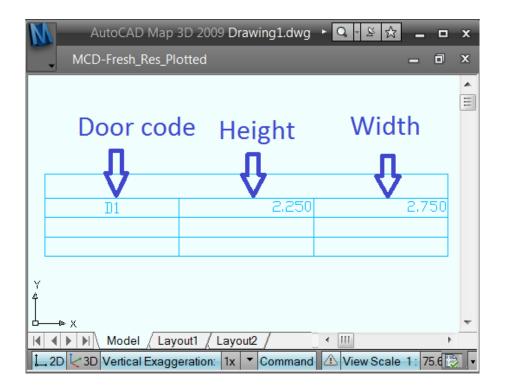


Select Dwelling Features (Plan) → Door /Opening / Arch Table Pick insertion point to place the predefined table

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Enter height and width of the door / door window / Opening / Arch in the table as shown in the figure

To increase the number of rows in the table **double click** on the bottom most right cell and press **Tab** as many times as many needed rows.



Select Dwelling Features (Plan) → Loft

Either Rectangle or Polyline option can be used based on the shape of the loft.

Enter the distance from ceiling and press Enter

Select Dwelling Features (Plan) → Opening/Arch

Either Rectangle or Polyline option can be used based on the shape of the Arch.

Enter the **opening/Arch code number** as per table.

Select Dwelling Features (Plan) → Window

Draw rectangle between room and floor area to represent window

Pick start point of the leader line on the just drawn rectangle (should be inside the room)

Pick second point of the leader line

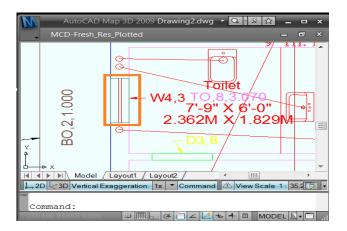
Enter window code (only integer is allowed; Prefix letter **W** is not required)

In case to represent **Ventilator** press **Enter** and enter ventilator code (only integer is allowed; Prefix letter V is not required)

To represent glass Line1 to Line6 commands from Miscellaneous menu can be used

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MCD

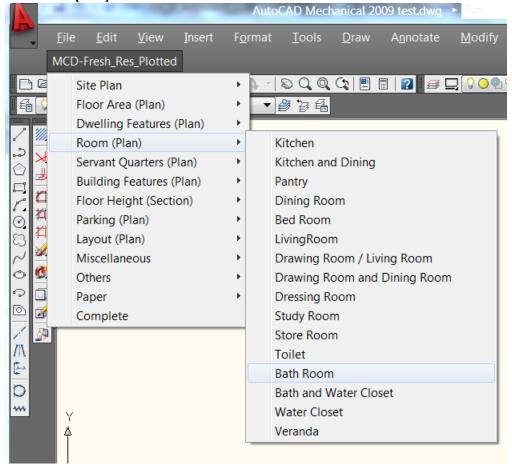


Select Dwelling Features (Plan) → Window Table
Pick insertion point to place the predefined table
Enter height and width of the window / ventilator in the table

To increase the number of rows in the table **double click** on the bottom most right cell and press **Tab** as many times as many needed rows.

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6.3.4 Room (Plan)



Draw in 1:1 scale in Meter.

Should be used to draw only plan views.

Height difference between floor finish and ceiling bottom need to be given as Room height

Select Room (Plan) → Kitchen

Either Rectangle or Polyline option can be used based on the shape of the kitchen.

Enter room height

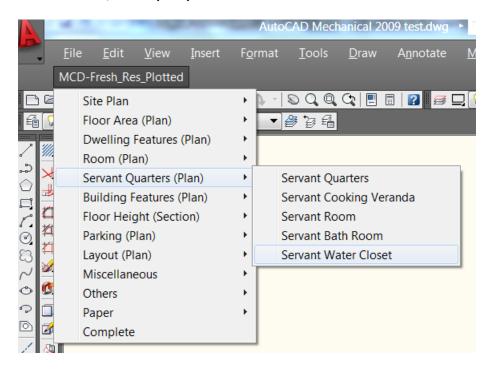
The above procedure can be adopted to draw following room features

- Kitchen and Dining
- Pantry
- Dining Room
- Bed Room
- Living Room
- Drawing Room / Living Room
- Drawing Room and Dining Room
- Dressing Room
- Study Room
- Store Room

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- > Toilet
- Bath Room
- Bath and Water Closet
- Water Closet
- > Veranda

### 6.3.5 Servant Quarters (Plan)



Draw in 1:1 scale in Meter.

Should be used to draw only plan views.

Height difference between floor finish and ceiling bottom need to be given as Room height

Select Servant Quarters (Plan) → Servant Quarters

Enter the floor number for the Servant Quarters

Either Rectangle or Polyline option can be used based on the shape of the room.

Enter room height.

Select Servant Quarters (Plan) → Servant Cooking Veranda

Either Rectangle or Polyline option can be used based on the shape of the room.

Enter room height.

The above procedure can be adopted to draw following Servant room features

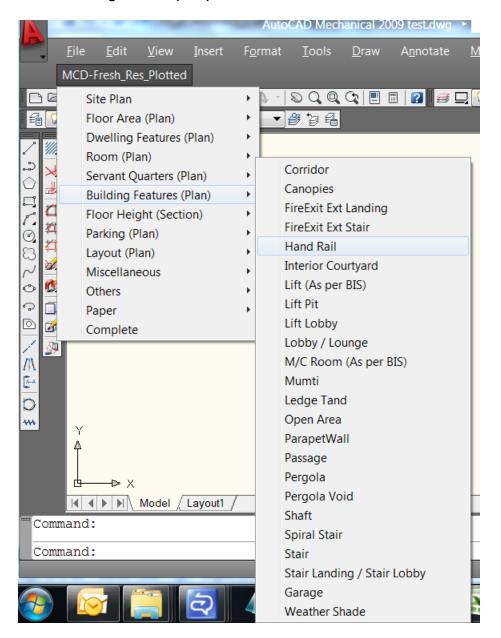
- Servant Room
- Servant Bath Room

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Architect

### Servant Water Closet

# 6.3.6 Building Features (Plan)



Draw in 1:1 scale in Meter.

Should be used to draw only plan views.

Select Building Features (Plan) → Corridor

Either Rectangle or Polyline option can be used based on the shape of the corridor.

Select Building Features (Plan) → Canopies

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**MCD** 

Either Rectangle or Polyline option can be used based on the shape of the corridor.

Enter clearance height

Select Building Features (Plan) → FireExit Ext Landing

Either Rectangle or Polyline option can be used based on the shape of the landing.

Select Building Features (Plan) → FireExit Ext Stair

Enter height of Raiser

Enter number of steps

Pick start point of rectangle and end point of the rectangle

If the direction of steps are OK then press Enter

If the direction of the steps to be drawn perpendicular then type Y and press enter

Select Building Features (Plan) → Hand Rail

Enter Hand rail height

**Pick series of points** as required (Curved boundary can be drawn by typing **A** to select **Arc** and can be switched back to **line** by typing **L** in the command line)

Press **Enter** to terminate the polyline

Pick on the drawn polyline to select start point of the leader

Pick second point of the leader

Text will be placed by the tool to represent the Hand Rail

Select Building Features (Plan) → Interior Courtyard

Either Rectangle or Polyline option can be used based on the shape of the interior courtyard.

**Enter Building Number** 

Enter Interior courtyard number (Should be identical in all the floor plans)

Enter height of the court yard from road center line

Select Building Features (Plan) → Lift (As per BIS)

Enter Lift number (Should be identical in all the floor plans)

Either Rectangle or Polyline option can be used based on the shape of the lift.

Select Building Features (Plan) → Lift Pit

Enter Lift pit number

Either Rectangle or Polyline option can be used based on the shape of the lift pit.

Select Building Features (Plan) → M/C Room (As per BIS)

Either Rectangle or Polyline option can be used based on the shape of the Mechanical room.

**Enter Building Number** 

Select Building Features (Plan) → Mumti

Either Rectangle or Polyline option can be used based on the shape of the Mumti.

**Enter Building Number** 

Select Building Features (Plan) → Ledge Tand

Enter height from the finished floor level

Either Rectangle or Polyline option can be used based on the shape of the Ledge Tand.

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Select Building Features (Plan) → Lobby / Lounge

Either Rectangle or Polyline option can be used based on the shape of the Lobby / Lounge

Select Building Features (Plan) → Lift Lobby

Either Rectangle or Polyline option can be used based on the shape of the Lift Lobby.

Select Building Features (Plan) → Open Area

Adopt same steps as like Site Plan → Open Area

Select Building Features (Plan) → Parapet Wall

**Pick series of points** as required (Curved boundary can be drawn by typing **A** to select **Arc** and can be switched back to **line** by typing **L** in the command line)

Press **Enter** to terminate the Polyline

Pick on the drawn Polyline to select start point of the leader

Pick second point of the leader

Enter Parapet wall height

Text will be placed by the tool to represent the parapet wall

Select Building Features (Plan) → Passage

Either Rectangle or Polyline option can be used based on the shape of the passage

Select Building Features (Plan) → Pergola

Enter pergola height

Either Rectangle or Polyline option can be used based on the shape of the pergola

Select Building Features (Plan) → Pergola Void

Either Rectangle or Polyline option can be used based on the shape of the pergola void

Select Building Features (Plan) → Shaft

Either Rectangle or Polyline option can be used based on the shape of the shaft.

Enter building number

Enter shaft number (Should be identical in all the floor plans)

Select Building Features (Plan) → Spiral Stair

Click center point of the circle

Enter radius of circle

Select the drawn circle

Pick a point to place the dimension of the stair

Select Building Features (Plan) → Stair

Enter height of Raiser

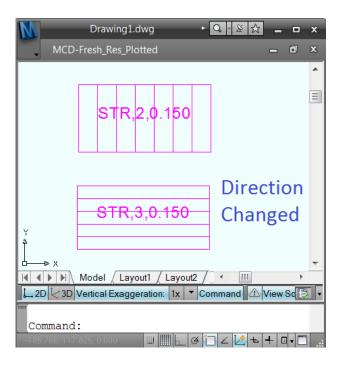
Enter number of steps

Pick start point of rectangle and end point of the rectangle

If the directions of steps are OK then press **Enter** 

If the direction of the steps to be drawn perpendicular then type Y and press enter

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Select Building Features (Plan) → Stair Landing

Either Rectangle or Polyline option can be used based on the shape of the landing.

Select Building Features (Plan) → Garage

Either Rectangle or Polyline option can be used based on the shape of the Garage. (Either at Stilt or Ground floor level)

Enter Headroom Height.

One and only Parking should have been drawn inside Garage

Select Building Features (Plan) → Weather Shade

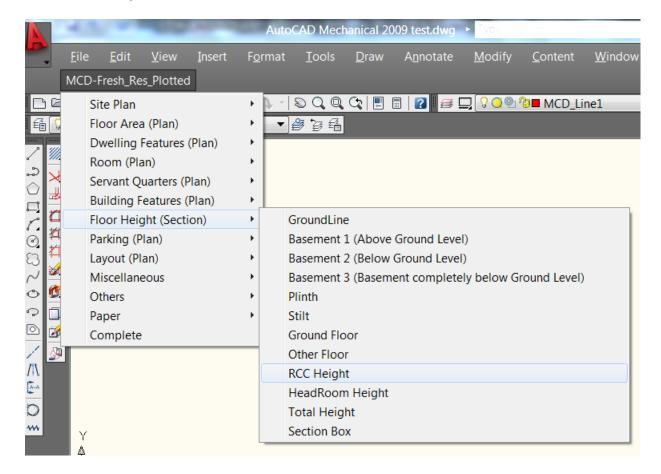
Enter height which is measured from finished floor

Either Rectangle or Polyline option can be used based on the shape of the weather shade.

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# 6.3.7 Floor Height (Section)

Architect



Draw in 1:1 scale in Meter.

Should be used to draw only sectional views.

Height difference between floor finish and ceiling bottom need to be represented in the floor height. RCC Height can be used to represent RCC thickness + floor finish

Select Floor Height (Section) → GroundLine

To represent average ground level this menu can be used.

Pick serious of point to draw the line

Select Floor Height (Section) → Basement 1 (Above Ground Level)

To represent basement portion which is above ground level (with ventilators) this menu can be used Enter building number for which this basement is being drawn

Either Rectangle or Polyline option can be used based on the shape of the basement (Use polyline in case of sunken slab)

Select the longest vertical line to mark the height and pick a point where the dimension needs to be placed

Select Floor Height (Section) → Basement 2 (Below Ground Level)

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**MCD** 

To represent basement portion which is below ground level (without ventilators) this menu can be used Enter building number for which this basement is being drawn

Either Rectangle or Polyline option can be used based on the shape of the basement

Select the longest vertical line to mark the height and pick a point where the dimension needs to be placed

#### TIPS:

B1 & B2 go together, hence both B1 & B2 should present or both should not be there in the DWG

Select Floor Height (Section) → Basement 3 (Basement completely below Ground Level)

To represent basement which is completely below ground level (without ventilators) this menu can be used

Enter building number for which this basement is being drawn

Either Rectangle or Polyline option can be used based on the shape of the basement (Use polyline in case of sunken slab)

Select the longest vertical line to mark the height and pick a point where the dimension needs to be placed

Select Floor Height (Section) → Plinth

Enter building number for which this plinth is being drawn

Either Rectangle or Polyline option can be used based on the shape of the plinth (Use polyline in case of sunken slab)

Select the longest vertical line to mark the height and pick a point where the dimension needs to be placed

Select Floor Height (Section) → Stilt

Enter building number for which this stilt is being drawn

Either Rectangle or Polyline option can be used based on the shape of the stilt (Use polyline in case of sunken slab)

Select the longest vertical line to mark the height and pick a point where the dimension needs to be placed

Select Floor Height (Section) → Ground Floor

Enter building number for which this ground floor is being drawn

Either Rectangle or Polyline option can be used based on the shape of the ground floor (Use polyline in case of sunken slab)

Select the longest vertical line to mark the height and pick a point where the dimension needs to be placed

Select Floor Height (Section) → Other Floor

Enter building number for which this floor is being drawn

Enter floor number for which this floor is being drawn

Either Rectangle or Polyline option can be used based on the shape of the ground floor (Use polyline in case of sunken slab)

Select the longest vertical line to mark the height and pick a point where the dimension needs to be placed

Repeat this command to draw all the floors from first to topmost floor

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Select Floor Height (Section) → RCC Height

Either Rectangle or Polyline option can be used based on the shape of the RCC (Use polyline in case of sunken slab)

Select the longest vertical line to mark the height and pick a point where the dimension needs to be placed

Select Floor Height (Section) → Headroom Height

Pick start point (top of landing)

Pick end point (bottom of just above landing)

Select the vertical line to mark the height and pick a point where the dimension needs to be placed

Select Floor Height (Section) → Total Height

Pick start point (Bottom most point of Stilt / Ground floor / B1)

Pick end point (Top most of top most RCC)

Select the vertical line to mark the height and pick a point where the dimension needs to be placed

Select Floor Height (Section) → Section Box

Each sectional view should be enclosed by the section box

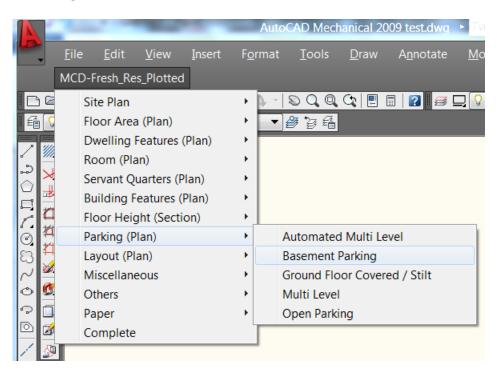
Pick start point of the rectangle

Pick end point of the rectangle

Enter name of the section (Ex: Section AA)

Move the text appropriately

# 6.3.8 Parking (Plan)



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**MCD** 

Draw in 1:1 scale in Meter.

Architect

Should be used to draw only plan views.

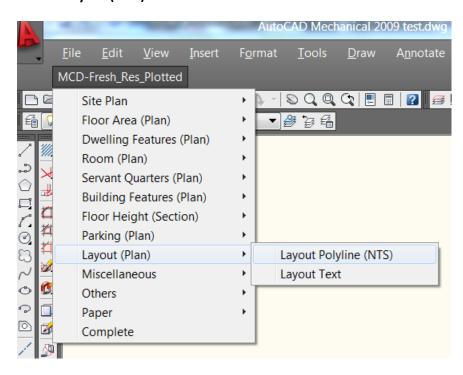
Tool will generate the parking chart, hence Architect need not populate in the drawing Select Parking (Plan) → Automated Multi Level

Either Rectangle or Polyline option can be used based on the shape of the automated multi level parking

Above method can be used to draw following parking feature

- Basement Parking
- Ground Floor Covered / stilt
- Multi Level
- Open Parking

# 6.3.9 Layout (Plan)



Draw in 1:1 scale in Meter.

Should be used to draw only layout views.

Tool will generate the Layout,

Select Layout (Plan) → Layout Polyline (NTS)

Polyline option can be used based on the shape of the Layout  $\,$ 

Layout Polyline need not be in scale 1:1 (Not to scale)

Select Layout (Plan) → Layout Text

Pick start point the text.

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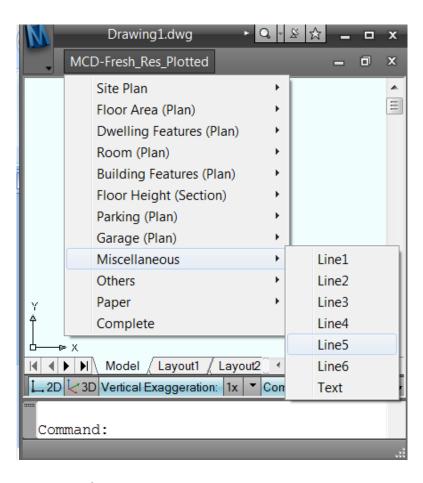
Enter rotation angle.

Enter the required text.

To terminate press **Enter** twice.

Layout Polyline need not be in scale 1:1 (Not to scale)

### 6.3.10 Miscellaneous



Draw in 1:1 scale in Meter.

Can be used in plan, site plan, section, elevation etc.

In case there is no command available to draw any of the features (may be required for MCD's approval / Owner of the building) please use the following commands. For example there is no room command available to draw in the section or elevation, in this scenario use Line1 to Line6 to graphically represent the feature and Text command can be used to mark type of room.

Line1

Line2

Line3

Line4

Line5

Line6

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Text

Select Miscellaneous → Line1

**Pick series of points** as required (Curved boundary can be drawn by typing **A** to select **Arc** and can be switched back to **line** by typing **L** in the command line)

Press **Enter** to terminate the polyline

The same steps can be followed to use Line2 to Line6

Select Miscellaneous → Text
Pick start point the text
Enter rotation angle
Enter the required text
To terminate press **Enter** twice

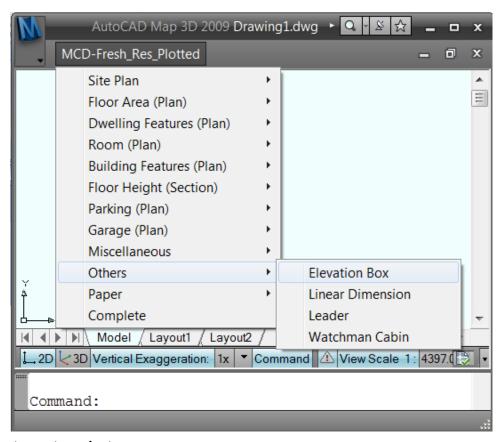
### TIPS:

If text height need to be changed modify the same by double clicking and enter the required value in Text  $\rightarrow$  Height field

Various line type / line weight can be set for Line1 to Line6 to differentiate in the plotting.

Type Layer press Enter and change line type or line weight can be changed as required

#### 6.3.11 Others



Select Others → Elevation Box

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Select first corner of the box
Select second corner of the box
Enter elevation name
Move the name appropriately
Each elevation view should be enclosed inside the Elevation box

### TIPS:

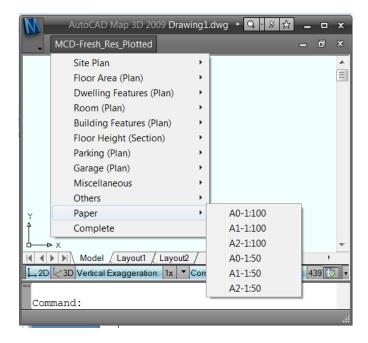
Line1 to Line6 can be used to draw elevation view

Select Others → Linear Dimension

Pick start point of the object from where the dimension to be measured Pick end point of the object up to where the dimension to be measured Wherever dimension is required use this command

Select Others → Leader
Pick start point the leader
Pick as many points as required
Enter to terminate the leader
Type the required Annotation
Press Enter to terminate Annotation
Press Enter to terminate the command

### 6.3.12 Paper



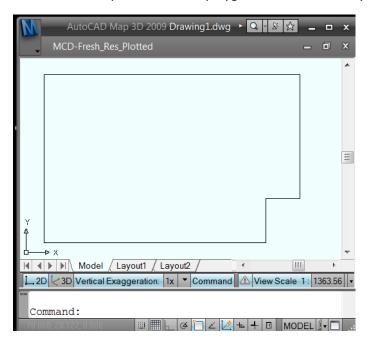
This command can be used to enclose the drawn features with required paper size boundary. Based on the plot area either 1:50 or 1:100 scale can be selected.

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### Select Paper → A0-1:100

In case the plot area is more than 250 sq. mt. use this 1:100 scale paper size. Pick the insertion point; a 6 sided polygon will be inserted by the tool



Move the drawn objects inside the polygon. (While moving ensure all the layers are unlocked and take care both polygon and their related text are moved together without changing their integrity)

This six sided polygon can be moved, but should not be stretched / modified

As many polygons (different paper sizes A0 / A1 / A2) as required can be used for a single building plan.

No objects can be kept outside of the paper boundary.

Same steps can be applied to be below commands too.

A1-1:100

A2-1:100

A0-1:50

A1-1:50

A2-1:50

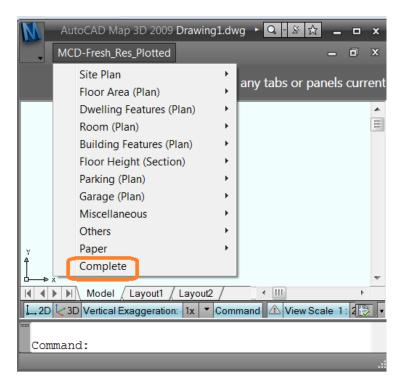
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## 6.3.13 Complete

Select Complete.

Before final save of the DWG press Complete button.



## TIPS:

While preparing the building plan save frequently to avoid losing your work, before final save press **Complete** button and then **Save**.

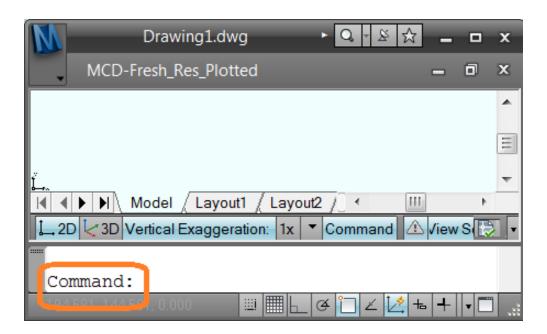
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### 6.4 Dos

- 1. Use Model space to draw
- 2. hould not use other than specified layers
- 3. Elevation use only MCD\_Line1 to 6 inside MCD\_Elevation box ..
- 4. While using \*.VLX, if the respective text is out of the rectangle / polygon, need to be moved inside if required can be scaled

#### 6.5 Don't

1. Do not press **Esc / Ctrl + C** during the command is being executed (i.e. till the tool displays **Command:** - Till such time carefully read the command line and provide appropriate input)



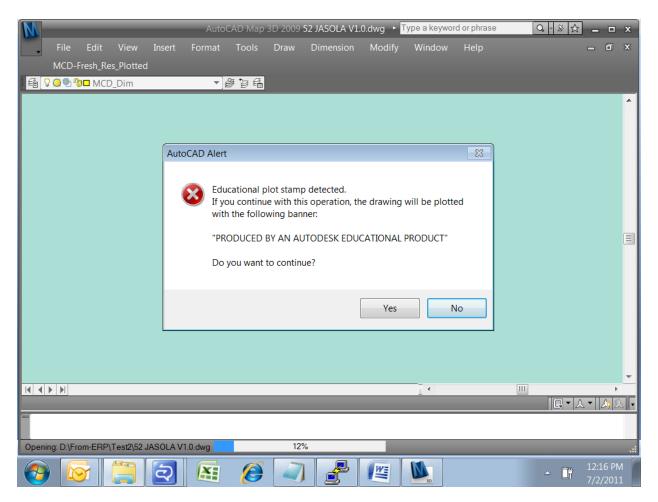
- 2. Do not delete / modify the text which was placed by the tool
- 3. Do not move the text (which was placed by the tool) outside the polygon

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# 7. Frequent Mistakes to be avoided

Following errors are frequently made by the Architect. Please take necessary steps to avoid the same.

- 1. Without loading VLX trying draw the features using the menu
- 2. Using old VLX / MNU to draw building plan
- 3. Using non-relevant building type VLX / MNU to draw building plan
- 4. Using other than specified layers
- 5. Deleting / modifying relevant text for the feature (Ex: KD,2,3)
- 6. Related text not present in the respective layer
- 7. Related text not inside the PLINE
- 8. Using Educational version of AutoCAD to prepare building plan



TIPS: To remove Education stamp

- Step 1: Open the file in AutoCAD
- Step 2: Save as AutoCAD 2000 / LT 2000 DXF (\*dxf) provide path to save
- Step 3: Open new drawing (use acad.dwt template) from non educational version of AutoCAD
- Step 4: Type DXFIN in command line and select the DXF created in step 2 and then save as

\*.DWG

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# 8. Guideline to correct the Validation error

### TIPS:

Here Text means the code used to represent the feature (Ex: DI,2,3.000, B-2,O,F-3 etc.)

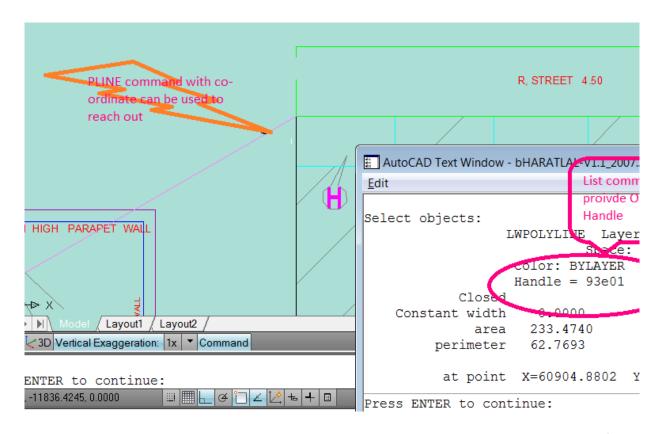
Polygon means single line having multiple vertices to form a required shape of the feature (Ex: room, floor area etc.)

## **Error Type 1:**

No description text found in polygon Object handle 93C79 at (60859.6954812057,-11850.6778406472,0)

To find out the object type 'PLINE / LINE' and enter the co-ordinate (60859.6954812057,-11850.6778406472); that would be the start point the PLINE and then click anywhere on the screen (alternatively use scroll button of the mouse to zoom to the start point of the PLINE), and you can zoom to the start point of the PLINE to reach the object. If there are many features present at that co-ordinate list each features one by one to find the Object handle 93C79. Below figure will provide more clarity.

Alternative (abbreviation of find handle) type **FH** and press **Enter** and type **93C79** then press **Enter**, tool will draw a red color circle at the start point the feature and zoom to that location.



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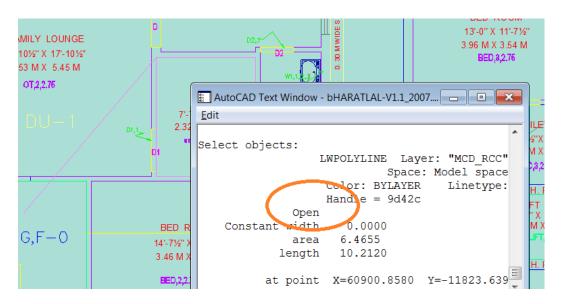
Below possible mistake could have created the error:

- 1. Missing relevant text for the feature (Ex: KD,2,3)
- 2. Related text not present in the respective layer
- 3. Related text not inside the PLINE

# **Error Type 2:**

Open polygon found in MCD\_Canopies At (112706.83204895,-35820.7800805769,0)

To find the object use PLINE and co-ordinate. List command will confirm the PLINE is open as below figure.



Type 'PEDIT' command and select the object and type 'C' to correct the mistake.

Alternatively erase the polyline and corresponding text and redraw with the help of menu.

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### **Error Type 3:**

MCD\_Cupboard not having expected syntax for Object handle 9B1AB at (60884.9875723905,-11852.773984551,0) (Ex:CUP,1,PN,1.5)



Syntax of the text is not as required. Please erase the polyline and corresponding text and redraw with the help of menu.

# Error Type 4:

Text does not have corresponding polygon - (71336.8624401434,-11509.5434415597,0)

Zoom to the feature using the co-ordinate as explained in Error Type 1

Below possible mistake could have created the error:

- 1. Polygon might have deleted
- 2. Polygon might have open error as like Error Type 2
- 3. Text might have been moved outside of the polygon
- 4. There could have more than one text inside the polygon

Alternatively erase the test and corresponding polyline (if found) and redraw with the help of menu.

## **Error Type 5:**

MCD\_Dwelling\_Area is outside of the MCD\_Floor\_Area - Object Handle :9A23 - (71302.228479689,-11494.5065364262,0)

Zoom to the feature using the co-ordinate as explained in **Error Type 1**Analyze which and where polygon / part of polygon is outside the floor area. Correct by stretching / moving vertices etc.



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The error need not be at the mentioned co-ordinate, can be anywhere along the polygon's perimeter

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# **Error Type 6:**

Drawing can not open, Please upload valid dwg

Below possible mistake could have created the error:

- 1. The drawing would not have drawn using AutoCAD 2004 to 2012
- 2. The drawing would have drawn using AutoCAD educational version
- 3. While open new drawing (before start up the drawing) would not have selected acad.dwt

Draw using proper AutoCAD version and resubmit

# **Error Type 6:**

Mtext is not allowed in Mcd\_Dim1 - (58530.2248305979,580.597717228828,0)

AutoCAD Mtext is not allowed in that specific layer.

## Other Errors:

S.	Error Message	Possible Mistake
No.		
1.	No -MCD_Boundary code found to polygon Object	Relevant text placed by tool would
	handle 334B -	have been deleted / moved / modified
	(58610.2389367934,596.89578193664,0)	
2.	Line is not allowed in MCD_Stair -	Line was drawn in specific MCD layer –
	(26.8158445248272,34.2273456312266,0)	not allowed
3.	Object out side the paper polygon, Handle : 21EE	Few object might have been placed
		outside paper polygon – move them
		inside appropriately
4.	MCD_Setback_Area Object Handle :8AA8 overlaped	Two polygons were drawn in such a
	with MCD_Setback_Area Object Handle :8AA6 -	way that they are overlapping each
	(71429.4571296521,-11501.4020108369,0)	other (will give error even it is a very
		small overlap - check all along the
		perimeter of the polygons)
5.	MCD_Building_Area Object Handle :1AB1 overlaped	Two polygons were drawn in such a
	with MCD_Setback_Area Object Handle :8AA8 -	way that they are overlapping each
	(71414.3169009809,-11478.9323884147,0)	other (will give error even it is a very
		small overlap - check all along the
		perimeter of the polygons)
6.	More than one description text found in polygon	Two relevant texts were inside the
	Object handle 8AA8 - (71429.4571296521,-	polygon
	11501.4020108369,0)	
7.	The 'MCD_Building_Area' should be exist.	Mandate feature is missing
8.	Sectional views are not enclosed by Section box	Sectional view should have enclosed

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	1	I
		with Section box
9.	Extra Floor area found in plan view at	In sectional view corresponding floor is
	:(2485.58478275698,511.790437834266,0)	missing – need to create the floor in
		section or delete the floor plan
10.	No Window table and Door Table found	Window table is missing
11.	The mandatory layer MCD_Street not found	Mandate feature is missing
12.	ZValue not allowed in mtext -	Feature / text might have drawn /
	(58585.2916626477,594.522576754466,-	modified in such a way that it has Z
	4.73532645018253E-22)	value – always Z value should be zero
13.	Invalid layer( WALL) found in dwg, Please remove	Feature / object present in non MCD
		layers
14.	Corresponding Building number(1) not found in	Building number mismatch between
	Building Area -	Site plan building and plan floor area /
	(58533.1754386406,584.086540668749,0)	sectional floor
15.	Corresponding Floor area not found in plan view for	In sectional view corresponding floor is
15.	:B-1,B,F-0	missing – need to create the floor in
	1.0-1,0,1-0	section or delete the floor plan
16.	No dimension found to floor height object handle	Dimension is missing in the section
10.	AF4D8 - (58574.2291724889,611.437674196982,0	Difficulties this string in the section
17.	Both B1 and B2 basements should exist -	Both B1 & B2 should coexist – one is
17.	(58555.3219419304,622.261693274972)	not allowed
18.		Corresponding door / window number
10.	Window/Door number not exist in tables -	
	(58585.5678518972,583.395792427787,1.59209485	is missing the door / window table
10	43468E-21)	While describe ashes a control
19.	Irregular polygon present Object Handle :AEF51 -	While drawing polygon, vertex over
	(58623.7279297934,593.047227436727,0)	vertex were placed – please erase
		polygon and corresponding text and
20	No Minds / Dans on the Country of the other dis-	redraw
20.	No Window/Door number found for object handle	Door / window is missing plan present
	347D - (58553.7367898517,571.973395864703,0)	in door table. In case Door polygon /
		Arrow / Door code (text) missing or
		the leader is exploded, this error
		message will be shown.
21.	Lift should not be present in terrace and basement :	Lift was drawn in terrace or Basement –
22	Mumti and MC room should be only on the towards:	Please remove
22.	Mumti and MC room should be only on the terrace : handle 123A - (615.2389367934,96.89578193664,0)	Either Mumti or Machine room present outside of the terrace – move them into
		terrace
23.	There should be atleast one parking area in garage:	No Parking area in garage -At least one
25.	handle 123A - (615.2389367934,96.89578193664,0)	parking should exist in garage – draw
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	parking area in garage
24.	There should be no door or opening arch in lift pit:	Existing of door or opening arch in lift pit -
	handle 123A - (615.2389367934,96.89578193664,0)	Please remove
25.	There should be no lift pit outside basement: handle 123A	Lift pit is placed in other floors – move it
	- (615.2389367934,96.89578193664,0)	to basement
26.	There should be no lift in basement : handle 123A -	Lift present in Basement – Please remove
	(615.2389367934,96.89578193664,0)	

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27.	There should be no servant area in the terrace/stlit: handle 123A - (615.2389367934,96.89578193664,0)	Servant area present in the terrace/stlit – Please remove		
28.	There should be atleast one spiral staircase in the servant	At least one spiral staircase should exist		
	quarters : handle 123A -	for servant quarters – draw spiral staircase		
	(615.2389367934,96.89578193664,0)	·		
29.	There should be atleast one bath or watercloset in the	At least one bath or watercloset should		
	servant quarters : handle 123A -	exist in servant quarters – draw bath or		
	(615.2389367934,96.89578193664,0)	watercloset in servant quarters		
30.	There should be no door connecting lift lobby and	Door / Opening present between lift lobby		
	staircase Handle: handle 123A -	and staircase lobby – remove it		
	(615.2389367934,96.89578193664,0)			
31.	Setback should cover entire side: handle 123A -	Setback was not drawn as per the bye-law		
	(615.2389367934,96.89578193664,0)	requirement		
32.	Setback having more than 4 sides are not allowed: handle	Setback having more than 4 sides – make		
	123A - (615.2389367934,96.89578193664,0)	sure Setback have 4 sides		
33.	The Basement is not equal or less than the ground floor: :	The Basement is not equal or grater than		
	handle 123A - (615.2389367934,96.89578193664,0)	the ground floor		
34.	There should be atleast one door/opening arch in each:	No door exist in room –		
	room			
35.	The Basement should 2M from adjoining properties:	Distance between Basement and adjoining		
	handle 123A - (615.2389367934,96.89578193664,0)	properties is less than 2 M		
36.	MCD_101_Plot_Area_Floor is not identical with Plot area:	MCD_101_Plot_Area_Floor was modifed –		
	handle 123A - (615.2389367934,96.89578193664,0)	not allowed		
37.	There should be no floor area without plot area: handle	Floor area should be drawn inside		
	123A - (615.2389367934,96.89578193664,0)	MCD_101_Plot_Area_Floor		
38.	There is no adjacent plot or park or street:	Adjoining properties is missing		
	615.2389367934,96.89578193664,0)			
39.	Cupboard should be inside the floor area: handle 123A -	Cupboard is placed outside of the floor		
40	(615.2389367934,96.89578193664,0)	area – move it to inside of the floor area		
40.	Duplex found in only one floor: handle 123A -	Duplex present only one floor		
41	(615.2389367934,96.89578193664,0) Triplex found in only in 2 floors: handle 123A -	Tripley present only 2 floors		
41.	(615.2389367934,96.89578193664,0)	Triplex present only 2 floors		
42.	Paper Size polygon should be exist in the dwg:	Paper size polygon is missing in the DWG -		
42.	(615.2389367934,96.89578193664,0)	Paper Size polygon should be exist in the		
	(013.2369307934,90.69376193004,0)	dwg		
43.	Paper size polygon modifed: handle 123A -	Paper size polygon has been modified.		
45.	(615.2389367934,96.89578193664,0)	Tuper size polygon has been mounicu.		
44.	Paper scale should be 1:100 only for above 250 SQMT	Not selected appropriate scale		
77.	plot area: handle 123A -	Not selected appropriate scale		
	(615.2389367934,96.89578193664,0)			
45.	Paper scale should be 1:50 only for below 250 SQMT plot	Not selected appropriate scale		
.5.	area : handle 123A - (615.2389367934,96.89578193664,0)	The state of the s		
46.	Stilt should not have Dwellings and rooms :	Dwelling or room was drawn in stilt –		
	(615.2389367934,96.89578193664,0)	Remove it.		
47.	Landing width is not equal to its stair:	Landing width and stair are not equal		
	(615.2389367934,96.89578193664,0)			
48.	Dimension overlapping with another dimension :	Two Dimensions were drawn in such a way		
	(615.2389367934,96.89578193664,0)	that they are overlapping each other		
49.	In dimension layer unwanted object found: handle 123A -	Not relevant objects / features present –		

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	Ι	
	(615.2389367934,96.89578193664,0)	Remove the same
50.	Empty section box is not allowed (615.2389367934,96.89578193664,0)	Missing the section view
51.	Coexistence of Basement, Plinth, Ground floors are not	Coexistence of Basement, Plinth, Ground
J1.	allowed -	floors
52.	RCC does not exist for floor object: handle 123A -	RCC is missing for the floor
52.	(615.2389367934,96.89578193664,0)	RCC is missing for the noor
53.	Atleast one ground floor should exist in the plan	Ground floor is missing
54.	Building no(4) not used in floor area	Site plan building do not have
		corresponding plan – mismatch of building
		number could be a reason
55.	Corresponding Building number(4) not found in Building	Corresponding building for plan is missing
	Area	in site plan – mismatch of building number
		could be a reason
56.	MCD_Room is outside of the MCD_Dwelling	Room is outside of the Dwelling area –
	615.2389367934,96.89578193664,0)	move it to inside
57.	MCD_Plot is not exist :	Plot area is missing
٥,,	615.2389367934,96.89578193664,0)	
58.	MCD Kitchen is overlayed MCD bed :	Two rooms were drawn in such a way that
50.	615.2389367934,96.89578193664,0)	they are overlapping each other (will give
	013.2303307334,30.03370133004,07	error even it is a very small overlap - check
		all along the perimeter of the rooms)
		an along the perimeter of the rooms)
59.	The 'MCD_Plot_Area' should be only one	More than one Plot area has been drawn –
		only one is allowed (Plot Area is different
		from Plot Area Floor)
60.	MCD_Plot_Area' should be exist	Plot Area is missing
61.	The 'MCD_Building_Area' should be exist	MCD_Building_Area is missing
62.	MCD_Dwelling_Area' should be exist	MCD_Dwelling_Area is missing
63.	The 'MCD_Street' should be exist.	MCD_Street is missing. Please draw the
03.	THE WED_Street should be exist.	MCD_Street'
64.	The 'MCD_Street' should be only one	More than one 'MCD_Street' has been
04.	The Med_street should be only one	drawn using Exiting Front command.
65.	Only WC and DRE can have 7 Feet wall redraw the room	7 feet height wall has been drawn other
65.	Only WC and DRE can have 7 Feet wan redraw the room	than WC & Dressing room.
	Invalid layer MCD, poly found in dug. Please remove	Invalid layer was found. Please Remove
66.	Invalid layer MCD_poly found in dwg, Please remove	•
C7	The mandatony layer IMCD Dist. Area! mot formal	invalid layer.
67.	The mandatory layer 'MCD_Plot_Area' not found	Missing mandate feature
68.	not having expected syntax for Object handle	Text placed by the tool was modified –
	(58610.2389367934,596.89578193664,0)	delete text and polygon and redraw.
69.	'MCD_Building_Area' is outside of the "'MCD_Plot_Area"	'MCD_Building_Area' is outside of rhe
	- Object Handle 334B -	MCD_Plot_Area. Please make sure
	(58610.2389367934,596.89578193664,0)	'MCD_Building_Area' is inside
		MCD_Plot_Area
70.	No 'MCD_Building_Area' exist in MCD_Plot_Area	Existing of 'MCD_Building_Area' is not in
		MCD_Plot_Area. Please make sure
		'MCD_Building_Area' is inside
		MCD_Plot_Area
71.	Drawing cannot open, Please upload valid dwg	Drawing was drawn using Educational
		version of AutoCAD or some other SW –

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need to draw using AutoCAD 2004 – 2009

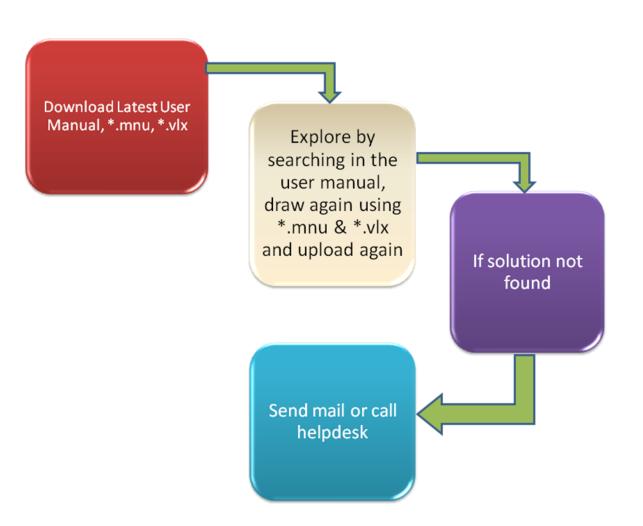
MCD will introduce new validation checks and incorporate the same as and when required, would be self explanatory and above sample errors can be referred back to understand better.

Bye-law report is self explanatory one.

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# 9. Feedback / Help Line



We have put our best effort to make this tool user friendly and we are improving on continues basis. We welcome your feedback to enhance further.

# **Assumption:**

AutoCAD know person having though understanding of the instruction provided in the user manual has explored to the best of his ability before approaching feedback / help line.

Mail: <u>buildingplan-helpdesk@mcd.gov.in</u>

Phone: 011 23227411 / 13 / 14

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